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EDUCATORS' PERSPECTIVES AND INSTRUCTION: FACTORS THAT INFLUENCE STUDENTS' SELF-DETERMINATION SKILLS

Stephanie D. Wozniak

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Stephanie D. Wozniak

Bachelor of Science in Psychology, Vassar College, 2008

Master of Science in Counselor Education, Western Connecticut State University, 2011

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Stephanie Wozniak, EdD, LPC/LMHC

Western Connecticut State University

Abstract

This study was designed to understand the factors that influence educators' perspectives and amount of instruction of student self-determination skills. A mixed methods correlational survey design was utilized to study these factors. The primary research question was "To what degree and in what manner do primary assignment, years of experience, and educators' ratings of importance of each component of self-determination predict educators' total mean self-reported amount of instruction of the components of self-determination?" Quantitative analyses revealed three significant results. For Research Question One, a stepwise multiple regression for predictor variables of ratings of importance found three variables that predicted the total mean self-reported amount of instruction: (a) rating of importance of goal-setting and attainment, (b) rating of importance of choice-making, and (c) rating of importance of self-awareness and self-knowledge. The total variance explained by the model was 21.4%. For Research Question Two, correlation coefficients were conducted to test the relationship between ratings of importance, self-reported amounts of instruction and the sum of number of sources of knowledge of self-determination. Of the 136 correlations, 39 showed strong, positive correlations, 46 showed moderate, positive correlations, and 40 showed weak, positive correlations. For Research Question Three, MANOVA analyses revealed a statistically significant difference between educators working in general education, special education, and related services on the dependent

variables of total mean self-reported amount of instruction and mean rating of importance. Special educators ($M = 5.17$) rated the components of self-determination as significantly more important than general educators ($M = 4.92$). Related service personnel ($M = 4.85$) provided instruction in the components of self-determination significantly more often than general ($M = 4.20$) or special educators ($M = 4.45$). Research Question Four was used to analyze the responses to five open-response questions and included exploratory analyses. As reflected in their definitions and identified important components of self-determination, the emergent theme of perseverance was identified with much more frequency than the essential characteristics or component behaviors of self-determination. Overall, educators differed on their amount of instruction and ratings of importance of self-determination based on role. They reported they had familiarity with self-determination and identified that it was important, but less than half of the educators believed that schools and educators support instruction in self-determination, and their definitions of self-determination did not strongly align with the operationalized definition of self-determination that supports instruction.

APPROVAL PAGE

School of Professional Studies
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Doctor of Education Dissertation

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Presented by

Stephanie Wozniak, Ed.D.

Pauline E. Goolkasian, Ed.D.	*Pauline E. Goolkasian*	4/6/20
Dissertation Chair	Signature	Date
Marcia A. B. Delcourt, Ph.D.	*Marcia A. B. Delcourt*	4/6/20
Committee Member	Signature	Date
Kelly Clark, Ph.D.	*Kelly Clark*	4/6/20
Committee Member	Signature	Date

2020

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DEDICATION

This dissertation is dedicated to my family. Your unwavering encouragement and support was the rock upon which I relied during the challenging moments. Thank you for your support while I was in this program, and the support that you have provided throughout my life to succeed in my educational career. From learning how to read, divide fractions, edit papers, to statistical analysis, you always helped me when I needed it, encouraged my growth, and shared in my successes. I cannot put into words how important your love and support are to me.

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CHAPTER ONE: INTRODUCTION TO THE STUDY

Until the 1980s, individuals with disabilities were often housed in large institutional settings, separated from their families and communities. P.L. 94-142 passed in 1975 (National Education Association of the United States, 1978) and guaranteed a free and appropriate public education to students with disabilities. Now known as the Individuals with Disabilities Education Act (IDEA), the law defines a child with a disability as:

> …a child with intellectual disabilities, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (referred to in this chapter as "emotional disturbance"), orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and who, by reason thereof, needs special education and related services. (IDEA, 2004)

Although P.L. 94-142 passed in 1975, large institutions still housed thousands of individuals with disabilities, often in poor conditions and without appropriate education programs. Geraldo Rivera's famous exposé of the Willowbrook State School in 1972 placed a critical eye on these facilities (Rivera, 1972). Studies from the early 1980s showed that students with disabilities experienced segregated and non-productive lives after exiting public school (Halloran & Simon, 1995). The Geraldo Rivera exposé led to public outcry and federal legislation to protect individuals with disabilities, resulting in the closure of Willowbrook and other similar institutions. Advocacy for and by individuals with disabilities led to a strong emphasis on inclusion and community integration.

Leading up to the signing of the Americans with Disabilities Act (ADA) in 1990, Congress made a bold public statement against the culture of institutionalization in the United States:

> Historically, society has tended to isolate and segregate individuals with disabilities, and, despite some improvements, such forms of discrimination against individuals with disabilities continue to be a serious and pervasive social problem. (42 U.S.C. Section 12101(a)(2)).

The ADA included an integration mandate, which required public entities to "administer services, programs, and activities in the most integrated setting appropriate to the needs of the qualified individuals with disabilities" (American with Disabilities Act of 1990, 28 C.F.R. § 35.130(d)). This mandate became the basis for a lawsuit against the Georgia Department of Human Resources on behalf of Lois Curtis. The Atlanta Legal Aid Society claimed that the Department of Human Resources did not provide the necessary services for Lois in her community as mandated by the ADA, resulting in her confinement to a hospital setting. Elaine Wilson also joined the suit. The court originally decided in favor of Lois and Elaine; however, the Atlanta Department of Human Resources appealed the decision at the Eleventh Circuit Court of Appeals. The United States Supreme Court upheld the local decision in favor of Elaine and Lois (Ginsburg & Supreme Court of The United States, 1998). This ruling, Olmstead v. L.C., set a national legal precedent to ensure that individuals with disabilities are provided with services in the community.

The Rehabilitation Act Amendments of 1992 also included an emphasis on inclusion and self-determination as an important component of a new, integrated role of individuals with disabilities in society. It states, "disability is a natural part of the human experience and in no

way diminishes the right of an individual to live independently, enjoy self-determination, make choices, contribute to society, pursue meaningful careers, and enjoy full inclusion and integration in the economic, political, social, cultural, and educational mainstream of American society" [Section 2 (a)(3)(A-F)]. The federal regulatory mandates during the 1990s and the Olmstead decision created a political climate supporting a national focus on inclusion.

The 20-year period between 1988 and 2008 showed an increase in community-based services for individuals with disabilities, more than any other 20-year period in history (Salmi, Scott, Webster, Larson, & Lakin, 2010). In 1989, Sandra Swift Parrino, the Chairperson of the National Council on Disability, emphasized the importance of a continued push for integration. In a report to the President of the United States, she described the rapid shift in educational expectations for students with disabilities, stating:

> The progress our nation has made in the education of students with disabilities in the past 15 years is remarkable and significant. The fact that a major debate in the field of special education is the role of separate schools and the nature and extent to which integration into general education classrooms should take place is a sign of significant growth and development. Just two decades ago the major debate was whether or not students with disabilities should have access to public education programs. (1989, p. X)

This observation of an increased focus on integration forecast a dramatic increase in the amount of time that students with disabilities spent in general education classes. At the time of this statement in 1989, only 31.7% of students with disabilities nation-wide spent 80% or more of their time in general education classes (National Center for Educational Statistics, NCES, 2017). By 2015, the percentage nearly doubled to 62.5% (NCES, 2017b), showing that the emphasis on

integration has resulted in the majority of students with disabilities spending most of their time in general education classes.

In New York State, similar trends in the participation rate of students with disabilities in general education classes is evident in the data on Least Restrictive Environment over time. As reported in the Part B Annual Performance Report for 2007-08 in New York State, 43.2% of students with disabilities spent more than 80% of their time in regular classes in the 1997-1998 school year (New York State Education Department, February 2009). Fifteen years later, this percentage increased to 57.5% (New York State Education Department, 2013). Although New York State has shown an overall increase in the participation of students with disabilities in general education classes, when compared to other states, New York ranks 49th overall in this performance area (New York State Education Department, November 2015; Staff Curriculum Development of New York State, 2011). In 2015, a New York State Special Education field advisory memorandum included a statement emphasizing the importance of inclusion and the participation of students with disabilities in general education classes:

> …in New York State (NYS), data shows that far too many students with disabilities are removed from their general education classes and schools, disparate with the data from other states. Over the past two decades, the State has promoted reform in this area through law, regulations, policy, monitoring, partnerships, professional development and technical assistance…The purpose of this memorandum is to seek the immediate attention of parents, school districts and communities to maximize participation of students with disabilities in general education programs. (New York State Education Department, December 2015, p. 2)

The memorandum shows that the emphasis on integration is as strong, if not stronger, than it ever has been in New York. At a recent New York State Board of Regents meeting, Christopher Suriano, the Assistant Commissioner for Special Education, stated that supporting the inclusion of students with disabilities in general education classes continues to be a priority of the Office of Special Education (Suriano, 2019). In New York State, there has been a historical and continued emphasis on increasing the integration of individuals with disabilities with their typical peers.

With the advent of a national focus on community-based services and inclusion of individuals with disabilities, research in the 1980s began to focus on the rights of individuals with disabilities. Research topics included studying what skills were necessary for these individuals to be successful in their local communities, including independent living, employment, and postsecondary education. It became apparent that individuals needed to be causal agents in their own lives, making appropriate decisions and goals to be successful. The concept of this skill set, self-determination, began to form in the theoretical literature and play an important role in the education of students with disabilities.

Rationale for Selecting the Topic

This study sought to identify factors that influence educators' perspectives and amount of instruction of essential component behaviors of self-determination. Identifying these factors revealed differences in knowledge based on roles, ratings of importance of self-determination, and training. Past studies have explored similar variables but are limited in generalizability due to low survey response rates and specific population samples (Cho, Wehmeyer, & Kingston, 2013; Wehmeyer, Agran, & Hughes, 2000). The researcher studied a diverse regional sample of educators using a breadth of variables, building on previous studies. A sample of convenience

targeted educators throughout the Lower Hudson Valley region of New York State. The primary research question was "To what degree and in what manner do primary assignment (special education or general education), years of experience, and educators' ratings of importance of each component of self-determination (choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, and self-awareness and self-knowledge) predict educators' total mean self-reported amount of instruction of the components of self-determination?"

Understanding factors that predict educators' amount of instruction of the components of self-determination is the first step in improving students' levels of self-determination knowledge and skills.

Statement of the Problem

Students with disabilities show poor post-school outcomes when compared with typical peers (Benz, Lindstrom, & Yovanoff, 2000). When students with disabilities graduate from high school, they are less likely to be employed, enter postsecondary education programs, and live independently (Yin & Shaewitz, 2015). If the goal of education is to prepare students for their post-school outcomes, we need to provide them with the skills necessary to be successful. The number of individuals with disabilities in the workforce has dropped, workers with disabilities earn less than their similarly educated colleagues, and nearly 28% of working-age adults with a disability were living below the poverty line in 2011 (Yin & Shaewitz, 2015). Students with disabilities show a much lower high school graduation rate (65.5%) when compared to the national average (84.1%; NCES, 2017). Additionally, students with disabilities are less likely to complete college. Twenty-seven percent of students who disclosed their learning disabilities

completed college within six years, compared to the national average of 59% (Newman et al., 2011).

Studies show that students with higher self-determination skills are more likely to be engaged in post-school employment and have a better quality of life (Wehymeyer & Schwartz, 1997), but educators are not instructing students in these skill sets. Research on curriculum and instructional strategies designed to support self-determination have shown instruction in self-determination improved skills and increased access to the general education curriculum (Agran, et al., 2001). Grigal, Neubert, Moon, and Graham (2003) found that more than one third of teachers said that they were not familiar with self-determination. As a result, students with disabilities still show lower levels of self-determination than their peers without disabilities (Mithaug, Campeau, & Wolman, 2003). Students with disabilities are exiting school without the necessary self-determination skills to be successful. If students with disabilities are taught self-determination skills, post-school outcomes could be improved.

Significance of the Research

Educators' instruction in the components of self-determination plays a crucial role in whether students grow in self-determination skills. Several studies found direct instruction in self-determination to be an effective practice to improve post-school outcomes of students with disabilities (e.g., Agran, Wehmeyer, Cavin, & Palmer, 2008; Wehmeyer et al., 2013). "If self-determination is a goal we wish our students to achieve, we must approach it as an educational goal, one to be pursued as seriously and systematically as any other skill" (Agran, Snow, & Swaner, 1999, p. 301). Agran et al. (1999) found teachers believed self-determination is important; however, they did not discuss self-determination with their students or include behaviors related to self-determination in educational goals. Thoma, Nathanson, Baker, and

Tamura (2002) found a majority of teachers responded that their training on teaching self-determination had been insufficient. Building on Agran et al.'s (1999) and others' work (Cho, 2009; Wehmeyer, Agran, & Hughes, 2000), this study will gather additional information about educators' perspectives of self-determination and their amount of instruction of the components of self-determination with the goal of understanding factors that influence students' self-determination skills.

Description of Potential Benefits of the Research

Understanding factors that predict educators' amount of instruction of components of self-determination could be the first step in improving students' levels of self-determination knowledge and skills. For example, if the survey reveals differences between levels of instruction of self-determination based on roles, future research may explore effective modalities for targeting professional development in this area. This information could also be used to inform the curriculum of pre-service teacher preparation programs. In addition, if potential barriers to instruction of self-determination are identified, interventions could be designed to assist educators in providing instruction in self-determination skills, ensuring students receive instruction in self-determination and obtain positive post-school outcomes.

Brief Definition of Key Terms

1. *The Americans with Disabilities Act (ADA)* is a civil rights law, passed in 1990, that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public (ADA National Network, n.d.).
2. *Autonomy*, the sense of being in control over one's own behavior, is one of the three innate and universal psychological needs of self-determination (Deci & Ryan, 1985).

3. *Choice-making,* one of the essential component elements of self-determination, includes an individual's ability to be familiar with available options, select from several options without coercion, and express that preference to others (Wehmeyer, et al., 2007).
4. *Competence*, the sense of confidence and efficacy in one's capabilities, is one of the three innate and universal psychological needs of self-determination (Deci & Ryan, 1985).
5. *Decision-making*, one of the essential component elements of self-determination, is a "process involving a broad set of skills that incorporate problem-solving and choice-making to select one of several identified options" (Wehmeyer, et al., 2007, p. 34).
6. The *Education for All Handicapped Children Act of 1975 (P.L. 94-142)* is a federal law designed to "provide handicapped children a free, appropriate public education that emphasizes special education and related services designed to meet their unique needs. The Act also assures that the states and localities will receive assistance in providing for the education of all handicapped children and in the assessment and assurance of the effectiveness of efforts to educate handicapped children" (National Education Association of the United States, 1978, para 1).
7. *Goal-setting and Attainment skills*, one of the essential component elements of self-determination, "enables individuals to determine and set a goal, to develop a plan to achieve that goal, and to monitor and adjust that goal or plan accordingly" (Wehmeyer, et al., 2007, p. 49).
8. An *Individualized Education Program (IEP)* is the tool that ensures a student with a disability has access to the general education curriculum and is provided the appropriate learning opportunities, accommodations, adaptations, specialized services

and supports needed for the student to progress towards achieving the learning standards and to meet his or her unique needs related to the disability (NYSED, 2011).

9. The *Individuals with Disabilities Education Act (IDEA)* is a federal law that provides access to a free appropriate public education for eligible children with disabilities throughout the United States, ensuring access to special education and related services (U.S. Department of Education, n.d.).
10. The *Olmstead Act* is a Supreme Court decision that determined that the "unjustified placement or retention of persons in institutions severely limits their exposure to the outside community, and therefore constitutes a form of discrimination based on disability prohibited by Title II" of the ADA (Ginsburg, R. B. & Supreme Court of The United States, 1998, section III).
11. *Post-school outcomes* include postsecondary education, vocational training, integrated employment, and independent living (Martin, Marshall, & Maxson, 1993).
12. *Problem-solving,* one of the essential component elements of self-determination, is the ability to "use available information to identify and design solutions to problems" (Wehmeyer, et al., 2007, p. 34).
13. *Psychological empowerment* is a belief in the relationship between your actions and the outcomes you experience (Wehmeyer, et al., 2003).
14. *Related services* means "developmental, corrective, and other supportive services as are required to assist a student with a disability and includes speech-language pathology, audiology services, interpreting services, psychological services, physical therapy, occupational therapy, counseling services, including rehabilitation

counseling services, orientation and mobility services, medical services …, parent counseling and training, school health services, school nurse services, school social work, assistive technology services, appropriate access to recreation, including therapeutic recreation, other appropriate developmental or corrective support services, and other appropriate support services and includes the early identification and assessment of disabling conditions in students" (NYSED, 2002, p. 11).

15. *Relatedness,* the sense of belonging and feeling connected to others and one's community, is one of the three innate and universal psychological needs of self-determination (Deci & Ryan, 1985).
16. *Self-advocacy,* one of the essential component elements of self-determination, is the "ability to stand up for oneself and to advocate on one's own behalf" (Wehmeyer, et al., 2007, p. 60).
17. *Self-determination* is "acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life free from undue external influence or interference" (Wehmeyer, 1999, p. 56).
18. *Self-efficacy*, one of the essential component elements of self-determination, is understanding that one is a causal agent in one's own life (Wehmeyer, et al., 2007).
19. *Self-knowledge/self-awareness,* one of the essential component elements of self-determination, is understanding that you are a causal agent in one's own life (Wehmeyer, et al., 2007).
20. *Self-realization* is when people have "a comprehensive, and reasonably accurate, knowledge of themselves and their strengths and limitations to act in such a manner

as to capitalize on this knowledge, a good understanding of your strengths and support needs" (Wehmeyer, et al., 2003, p. 185).

21. *Self-regulation/self-management*, one of the essential component elements of self-determination, is the ability for self-instruction, self-monitoring, self-evaluation, and self-management (controlling one's own behavior by being aware of one's actions and providing feedback; Wehmeyer, et al., 2007).
22. *Special education* "means specially designed individualized or group instruction or special services or programs, as defined in subdivision 2 of section 4401 of the Education Law, and special transportation, provided at no cost to the parent, to meet the unique needs of students with disabilities" (NYSED, 2002, p. 12).

CHAPTER TWO: REVIEW OF THE LITERATURE

Students with disabilities show poor post-school outcomes when compared with typical peers (Benz, Lindstrom, & Yovanoff, 2000). When students with disabilities graduate from high school, they are less likely to be employed, enter postsecondary education programs, and live independently (Yin & Shaewitz, 2015). If the goal of education is to prepare students for their post-school outcomes, we need to provide them with the skills necessary to be successful.

Over the past 40 years, self-determination has been a topic in educational research as an important factor in improving the outcomes of students with disabilities. Recently, self-determination has been defined as "the ability to make choices, solve problems, set goals, evaluate options, take initiative to reach one's goals, and accept consequences of one's actions" (Rowe et al., 2015, p. 116). There is a large body of evidence demonstrating students who have higher levels of self-determination are more likely to succeed in their adult goals and achieve positive postschool outcomes (Berry, Ward, & Caplan, 2012; Clarke, 2008; Dattilo & Rusch, 2012; Field & Hoffman, 2002; Fornes, Rocco, & Rosenburg, 2008; Fowler, Konrad, Walker, Test, & Wood, 2007; Halpern, Yovanoff, Doren, & Benz, 1995; Hertzfeld, & Aaron, 2001; Izzo, Shogren, Lee, & Panko, 2016; Lachapelle et al., 2005; Martorell, Gutierrez-Recacha, Pereda, & Ayuso-Mateos, 2008; Mazzotti et al., 2016; Naumann, 2017; Powers et al. 2012; Shogren, Lee, & Panko, 2016; Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015; Simonsen & Neubert, 2012; Test, Fowler, & Kohler, 2013; Wehmeyer, et al., 2012; Wehmeyer et al., 2013; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997; Wehmeyer & Schwartz, 1998). The connection of self-determination to positive post-school outcomes shows that self-determination can provide an entry point for students with disabilities to access opportunities for success.

With the continued focus for integration, inclusive practices, and least restrictive environment, most students with disabilities receive instruction within general education classrooms (Wagner, Newman, Cameto, Levine, & Marder, 2003). In 2016, 94.9 percent of the 6,048,882 students ages 6 through 21 served under IDEA, Part B, were educated in regular classrooms for at least some portion of the school day (Office of Special Education and Rehabilitative Services, 2015). Possessing self-determination skills has been identified as a critical skill set for individuals with disabilities as they navigate increasingly integrated roles in their communities. "If self-determination is a goal we wish our students to achieve, we must approach it as an educational goal, one to be pursued as seriously and systematically as any other skill" (Agran, 1999, p. 301). Research on curriculum and instructional strategies designed to support self-determination have not only been shown to improve skills in self-determination, but also increase access to the general education curriculum (Agran, et al., 2001).

Unfortunately, research indicates students with disabilities show lower levels of self-determination than their peers without disabilities (Mithaug et al., 2003). Despite the availability of evidence supporting the efficacy of self-determination and effective instructional models, students with disabilities are not being taught this critical skill set. As a result, students with disabilities are exiting school without the necessary self-determination skills to be successful. Educators' perceptions of self-determination and amount of instruction in the classroom play a crucial role in whether students grow in self-determination skills.

Past studies have explored special educators' perspectives and levels of instruction of self-determination but are limited in generalizability due to low survey response rates and focused population samples (Cho, et al., 2013; Wehmeyer, Agran, & Hughes, 2000). This area of research found teachers believe self-determination is important and that it would prepare

students for success in school and postschool (Agran, Hong, & Blankenship, 2007; Wehmeyer, Agran, & Hughes, 2000); however, the level of instruction provided in this area is not ideal. Educators reported they did not include behaviors related to self-determination in educational goals (Agran et al., 1999; Agran et al., 2007; Thoma, et al., 2002; Wehmeyer et al., 2000) or discuss self-determination with their students. Thoma et al. (2002) found a majority of teachers responded that their training on teaching self-determination had been insufficient. Understanding factors that predict educators' amount of instruction of the components of self-determination could be the first step in improving students' levels of self-determination knowledge and skills.

Post-School Outcomes for Students with Disabilities

Despite the push for integration and community participation, students with disabilities show poor post-school outcomes when compared with typical peers (Benz, Lindstrom, & Yovanoff, 2000). Students with disabilities show a much lower high school graduation rate (65.5%) when compared to the national average (84.1%, NCES, 2017). This achievement gap is even greater in New York State. As reflected in the recently released 2014 Cohort Graduation Rate Data, 55.9 % of students with disabilities graduated within four years in New York, over 20 percentage points lower than their typical peers (80.4%; New York State Education Department, 2019).

When students with disabilities exit high school, they are less likely to be employed, enter postsecondary education programs, and live independently. Students with disabilities are significantly less likely to enroll in postsecondary education when compared to students in the general population (Sanford et al., 2011). Sanford et al. (2011) found that 55% of young adults with disabilities reported enrolling in postsecondary education while 62% of their same age peers in the general population reported having enrolled in postsecondary education. Not only are

students with disabilities less likely to enroll in postsecondary education, there are also significant differences in the types of postsecondary education in which they enroll.

Young adults with disabilities are less likely to have ever been enrolled in a four-year college or university and more likely to have enrolled in a 2-year or community college or vocational school than young adults in the general population (Getzel, 2014; Sanford et al., 2011). Additionally, students with disabilities are less likely to complete college. Twenty-seven percent of students who disclosed their learning disabilities completed college within six years, compared to the national average of 59% (Newman et al., 2011). Students with disabilities may have more difficulty in college settings as the responsibility to identify and schedule support services falls on the student, rather than the school.

The results of a survey of 137,456 first-time, full-time students who were freshman in 2016 from 184 U.S. colleges and universities revealed that 21.9% of incoming freshmen identified as having at least one disability/disorder, with some identifying more than one disability (Eagan et al., 2017). Students identified having the following disabilities with percentages for each disability of the total sample in parentheses: (a) learning disability (3.3%), (b) attention deficit hyperactivity disorder (6.5%), (c) autism spectrum disorder (0.7%), (d) physical disability (5.0%), (e) chronic illness (2.6%), (f) psychological disorder (10.7%), and (g) other (4.9%). Of these students with disabilities, 15% of students with learning disabilities did not plan on requesting tutoring help (Eagan et al., 2017). Eagan et al. (2017) proposed that without requesting help in college, students with learning disabilities would most likely have a more difficult time with their postsecondary coursework. Considering that college graduates earn one million dollars more on average than individuals with high school diplomas (Day &

Newburger, 2002), the decreased rate of college completion by individuals with disabilities also results in lower lifetime earning potential.

The number of individuals with disabilities in the workforce has dropped, workers with disabilities earn less than their similarly educated colleagues, and nearly 28% of working-age adults with a disability were living below the poverty line in 2011 (Yin & Shaewitz, 2015). Working-age individuals with disabilities have a much lower employment rate (35.2%) than working age individuals without disabilities (78.3%; Shogren & Ward, 2017). Not only are individuals with disabilities less likely to be employed, but those that are employed typically earn less than their peers. Individuals with disabilities who are employed earn 64% as much as their peers without disabilities (Yin, Shaewitz, & Megra, 2014). In 2015, working age people with disabilities in the United States showed a poverty rate of 27%, 15.4% higher than the rate of poverty for their peers without disabilities (11.6%; Shogren & Ward, 2017). If individuals with disabilities are unemployed or earning lower wages, they are less likely to be able to support themselves and live independent lives.

Individuals with disabilities are less likely to be living independently and involved in their communities. As reported in the Post-High School Outcomes of Young Adults With Disabilities up to 6 Years After High School: Key Findings From the National Longitudinal Transition Study-2, young adults with disabilities were significantly less likely to be living independently than their same-age peers without disabilities (Sanford et al., 2011). Thirty-six percent of young adults with disabilities were reported to be living independently at the time of a post-school interview, compared to the 44% of their peers without disabilities who reported to be living independently at the time of the interview ($p < .01$; Sanford et al., 2011). Young adults with disabilities are also less likely to be financially independent than their same-age peers.

Sanford et al. (2011) found that young adults with disabilities were less likely to have a checking account (60% vs 71%) or credit card (45% vs 55%) than were their same-age peers without a disability. These studies and statistics indicate that individuals with disabilities have less independence and less control over their lives.

If the goal of education is to prepare students for their adult lives, educators need to provide them with the skills necessary to be successful. Students with higher self-determination skills are more likely to be engaged in post-school employment and education and have a better quality of life (Berry, et al., 2012; Lachapelle et al., 2005; Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015; Wehymeyer & Schwartz, 1997), yet educators are not instructing students in these skill sets. Many educators are not familiar with self-determination (Grigal, et al., 2003). Without opportunities to learn self-determination, students are barred from accessing skillsets that could improve post-school outcomes. Instruction in self-determination and related skills is the key to unlocking positive outcomes for students.

Research on curriculum and instructional strategies designed to support self-determination have not only been shown to improve skills in self-determination, but also increase access to the general education curriculum (Agran, et al., 2001). Although research indicates that self-determination skills improve student outcomes and evidence-based practices to support self-determination are available, students with disabilities still show lower levels of self-determination than their peers without disabilities (Mithaug et al., 2003). As a result, students with disabilities are exiting school without the necessary self-determination skills to be successful.

Theoretical Foundation of Self-Determination

The definition of self-determination has evolved over time through the infusion of research findings and varying theoretical perspectives, including philosophy, determinism, political science, psychology, and education. The Oxford English Dictionary cites the first occurrence of the term, "self-determination" in 1652 defined as "the power or freedom to direct oneself or act independently; the capacity for free will" (OED online, 2018, 1a). The first occurrence of self-determination as a theoretical construct occurred the same year of Geraldo Rivera's exposé in a book chapter authored by Bengt Nirje as part of Wolf Wolfensberger's (1972) significant book on normalization, *The Principle of Normalization in Human Services*.

Bengt Nirje (1972) introduced self-determination as one's right to manage him or herself. He described the concept by saying:

> One major facet of the normalization principle is to create conditions through which a handicapped person experiences the normal respect to which any human being is entitled. Thus, the choices, wishes, desires, and aspirations of a handicapped person have to be taken into consideration as much as possible in actions affecting him. To assert oneself with one's family, friends, neighbors, co-workers, other people or vis-vis an agency is difficult for many persons. It is especially difficult for someone who has a disability or is otherwise perceived as devalued. (Nirje, 1972, p. 177)

Consistent with the first citation of the term, the core tenet of self-determination is one's right and ability to express and fulfill one's wishes and desires in life. The theory of self-determination is rooted in philosophy of autonomy and motivational psychology (Wehmeyer, et al., 2003). As part of Cognitive Evaluation Theory, Deci (1975) outlined that people have an intrinsic need to be self-determined, competent, and master optimal challenges. Deci and colleagues (Deci & Ryan, 1985) further expanded this concept to *Self-Determination Theory*. They defined self-determination as:

> The capacity to choose and to have those choices, rather than reinforcement contingencies drives, or any other forces or pressures, to be the determinants of one's actions. But self-determination is more than a capacity, it is also a need. We have posited a basic, innate propensity to be self-determining that leads organisms to engage in interesting behaviors. (p. 38)

As described by Deci and Ryan (1985), *Self-Determination Theory* is a way to explain human behavior resulting from the intrinsic need that individuals have to direct their own lives. Rooted in the Aristotelian view of human development and organismic theory (Serna & Lau-Smith, 1995), people have a natural tendency towards growth and development (Deci & Ryan, 2002). In contrast to Behaviorism and other social-cognitive theories that focus on extrinsic stimuli, Self-Determination Theory posits that there is "inherent tendencies toward psychological growth, a unified self, and autonomous, responsible behavior" (Deci & Ryan, 2002, p. 4).

Deci and Ryan (2002) described three innate and universal psychological needs of self-determination: (a) the need for competence (i.e., the sense of confidence and efficacy in one's capacities), (b) relatedness (i.e., the sense of belongingness and feeling connected to others and one's community), and (c) autonomy (i.e., the sense of being in control over one's own behavior). These needs form the necessary conditions for growth and well-being, naturally driving individuals towards environments that support them (Deci & Ryan, 2002). The inherent tendency towards growth interacts with social, contextual, and environmental factors (Deci & Ryan, 2002; Wehmeyer, et al., 2003). These influences can support or disrupt the natural tendency towards development. Practitioners who wish to support self-determination, therefore, should focus on these supporting factors.

In 1989, shortly after Deci and Ryan proposed their definition of self-determination, and the same year in which the National Council on Disability emphasized the importance of a continued push for integration, The National Conference on Self-Determination convened and

produced 29 recommendations for supporting self-determination (Ward, 2005). Michael Ward, serving as Chief of the Secondary Education and Transition Services Branch of the Office of Special Education Programs, U.S. Department of Education, attended this conference and emphasized self-determination as a critical component of education. In 1988, he described the importance of self-determination:

> Skills necessary for self-determination must be taught to all children and youth; it is especially important for children and youth with disabilities. Expecting youth who have been overprotected and restricted in terms of self-determination to be functional and independent adults is akin to expecting a nation that has lived under an oppressive, totalitarian system for centuries to govern by democratic principles, immediately after a revolution. Self-determination doesn't just happen; in requires a great deal of preparation and practice. (Ward, 1988, p. 3; as cited in Wehmeyer et al., 2003).

In this statement, Ward boldly emphasized the importance of self-determination as it relates to expectations of independence in adulthood. Additionally, he noted that this critical skill requires preparation. Ward's statement on self-determination was one of the first steps by the United States Department of Education to bring self-determination to the forefront of research in education. Based on one of the recommendations from the National Conference on Self-Determination, the U.S. Department of Education, Office of Special Education Programs (OSEP) focused on the creation of model programs supporting self-determination. In 1990, OSEP funded six new projects to promote self-determination for youth with disabilities. These six projects were the first of more than 25 projects focused on self-determination to be funded by OSEP (Ward & Kohler, 1996), resulting in interventions, curricula and planning strategies to increase students' involvement in their own planning. Michael Wehmeyer became a director of

one of these first projects and became a leader in research on self-determination in education (Wehmeyer, 1999).

Throughout the 1990s, Wehmeyer and others conducted intensive research on self-determination with a focus on conceptualizing a theoretical model to support instruction of self-determination (Wehmeyer, 1999). In 1998, the Division of Career Development and Transition emphasized the importance of self-determination though the publication of a policy statement on self-determination for youth with disabilities (Field, et al., 1998). During this same year, a consensus definition of self-determination was published in *A Practical Guide for Teaching Self-Determination*:

> Self-determination is a combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one's strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes, individuals have greater ability to take control of their lives and assume the role of successful adults in our society. (Field, et al., 1998, p. 2)

Key aspects of this definition include an individual's ability to know themselves and use that knowledge to set and achieve goals in their life. The ability to be self-determined is achieved through behaviors that support this process.

Wehmeyer (1999) proposed a functional model of self-determination, based on the function of a person's behaviors. He defined self-determination as "acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life free from undue external influence or interference" (p. 56). Wehmeyer (1999) and colleagues (Wehmeyer et al., 2003) emphasized that causal agency is central to the theory of Self-Determination and framed within a quality of life framework. Self-determination "enables people to make things happen in their lives" (Wehmeyer et al., 2003, p. 20). When

an individual's needs are met and they can participate in impactful life decisions, they have a better quality of life. Self-determination, therefore, is a core dimension of quality of life.

The functional theory of self-determination describes four essential characteristics that describe the function of behavior: autonomy, self-regulation, psychological empowerment, and self-realization (Wehmeyer et al., 2003). Researchers have implemented this functional model of self-determination in research on positive outcomes for individuals with disabilities, including the design and implementation of instructional activities that promote self-determination. Wehmeyer and colleagues (1999) identified that the role of education is promoting self-determination and proposed an operationalized definition of the theory of self-determination, identifying the component elements of self-determined behavior.

Through an operationalized definition of self-determination, the functional model provides a theoretical foundation for designing instruction. In contrast to the Deci and Ryan (2002) description of self-determination as an innate need, the operationalized definition categorizes it as a dispositional characteristic with essential components (Wehmeyer et al., 2003). In the Deci and Ryan (1992) description, self-determination is an innate need that leads individuals to participate in certain behaviors. Wehmeyer and colleagues (1999) establish that self-determination develops over a child's life span as they learn the skills necessary to be causal agents in their life, meaning instruction in these skills can help develop self-determination.

Wehmeyer, Agran, and Hughes (1998) described 12 component skills necessary for self-determined behavior: (a) choice making; (b) decision making; (c) problem solving; (d) goal setting and attainment; (e) independence, risk taking and safety skills; (f) self-observation, evaluation, and reinforcement skills; (g) self-instruction; (h) self-advocacy and leadership skills; (i) internal locus of control; (j) positive attributes of efficacy and outcome expectancy; (k) self-awareness; and (l) self-knowledge. This summary of component skills has appeared in the literature in more condensed versions,

identifying eight or nine essential components of self-determined behavior (Wehmeyer et al., 2000). The functional model has been empirically validated (Shogren et al., 2008; Wehmeyer, Kelchner, & Richards, 1996) and operationalized through the development of an assessment (Wehmeyer, 1995). Using multiple discriminant function analysis from self-reported and observable measures between individuals in either a high self-determination group or low self-determination group, Wehmeyer et al. (1996) revealed significant differences between individuals on each of the four essential characteristics of self-determination. The ARC Self-Determination Scale (Wehmeyer, 1995), a self-report measure of self-determination funded through the OSEP research projects on self-determination was developed using the operationalized behaviors of self-determination. The internal consistency reliability of the scale is .90, calculated using Chronbach's Alpha. These measures establish the validity of the operationalized theory of self-determination.

Often, theories of development, education, and growth, although critically important, are far removed from practical application. The functional model of self-determination operationalized a theory of innate need to be observable and teachable component behaviors. This moved the theory of self-determination out of the theoretical realm into the classroom.

The functional model has been recently revised and extended as "Casual Agency Theory" to reflect the changes in the development of positive psychology, how disability is understood, and current research knowledge (Shogren et al., 2015). Importantly, it emphasizes self-determined action, differentiating it from the emphasis on self-determined behavior as in the functional model. Causal Agency Theory defines self-determination as a "dispositional characteristic manifested as acting as the causal agent in one's life" (Shogren, Wehmeyer, Palmer, Forber-Pratt et al., 2015, p. 258). Casual Agency Theory provides a framework for research and instructional support in agentic action to support casual agency, and overall well-being of all students.

Over the past 40 years, the definition of self-determination has evolved through a cache of research and study. Defining the components of self-determined behavior in the functional model of self-determination (Wehmeyer, 1999) was an important step as it brought self-determination from the theoretical literature into instructional practices in the classroom. The study presented in this dissertation was based on this functional model of self-determination as it extends existing research on the essential components of self-determined behavior. Describing each component of self-determination and its development enabled researchers to identify effective instructional strategies to support self-determination.

Instruction in Self-Determination

Instruction of self-determination is an effective strategy to build the skills of students with disabilities and improve their post-school outcomes. Research has shown that self-determination can be taught and can improve post-school outcomes of students. To be provided in the most efficient and effective manner, current recommendations include providing instruction in self-determination within the general education curriculum.

Students can become more self-determined through direct instruction in self-determined behaviors (Agran, 1997; Algozzine, Browder, Karvonen, Test, & Wood, 2001; Field et al., 1998; Malian & Nevin, 2002; Serna & Lau-Smith, 1995; Wehmeyer et al., 1998). Many books and instructional models are available that include strategies to teach self-determination (Cook, Peterson, & Jonikas, 2004; Field & Hoffman, 1996; Field, Martin, Miller, Ward, & Wehmeyer, 1998; Fullerton, 1994; Hoffman & Field, 2005; Test, Karoven, Wood, Browder, & Algozzine, 2000; Powers et al., 1996; Van Reusen, Bos, Schumaker, & Deshler, 2002; Ward & Kohler, 1996; Wehmeyer, 1998; Wehmeyer et al., 2004; Wehmeyer, Agran, & Hughes, 1998;Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000). In addition to available curriculum, numerous formal and informal assessments are also available for educators to progress monitor students' levels of

self-determined behavior and support instruction (Abery, Rudrud, Arndt, Schauden, & Eggebeen, 1995; Clark & Patton, 1998; Fullerton, 1992; Hoffman, Field, & Sawilowsky, 1995; Hoffman, Field, & Sawilowsky, 1996a; Hoffman, Field, & Sawilowsky, 1996b; Martin & Marshall, 2016; Miller, Lombard, & Corbey, 2007; Wehmeyer, 1996; Wehmeyer & Kelchner, 1995; Williams & Dattilo, 2000; Wolham, Campeau, Dubois, Mithaug, & Stolarski, 1994). As part of the Self-Determination Synthesis Project, Test et al. (2000) identified 60 curricula designed to promote self-determination skills. Many of these models have shown strong evidence in increasing the self-determination skills of students.

Recently, Wehmeyer, Palmer, Shogren, Williams-Diehm, and Soukup (2013) established a causal relationship between interventions to promote self-determination and the outcome that youth with disabilities become more self-determined. They conducted a randomized trial with high school students receiving special education services for mental retardation (28%) or learning disability (72%). Students in the intervention group (n = 110) participated in multiple instructional components to promote self-determination over a three-year period. Teachers in schools assigned to the intervention condition selected from a collection of evidence-based interventions to promote self-determination. The intervention group showed significantly greater growth in self-determination scores across all interventions when compared to the control (n = 71; Wehmeyer et al., 2013). This study presented strong evidence that instruction in self-determination can improve the self-determination of students with disabilities.

One of the most researched models of instruction for self-determination is the Self-Determined Learning Model of Instruction (SDLMI; Wehmeyer, et al., 2000). It has been identified as an effective model to increase the self-determination scores of students (Agran, et al., 2008; Izzo & Lamb, 2002; Lee et al., 2008; Palmer & Wehmeyer, et al., 2003; Shogren,

Palmer, Wehmeyer, Williams-Diehm, & Little, 2012; Wehmeyer et al., 2000). The model provides instructional guides to teach students a self-regulated goal-setting and problem solving process (Shogren, Wehmeyer, Burke, & Palmer, 2017). The National Technical Assistance Center on Transition identified the SDLMI as an evidenced-based practice for students with disabilities and students with intellectual disabilities and a research-based practice for students with autism and learning disabilities (NTACT, 2016). In the NTACT practice description, they outline that the SDLMI is an evidence-based practice for students with disabilities based on four methodologically sound group studies and four methodologically sound single-case studies across 531 participants conducted by at least three different research groups in three different geographic locations, an evidence-based practice for intellectual disabilities based on three methodologically sound group studies and three methodologically sound single-case studies across 164 participants conducted by at least three different research groups in three different geographic locations, a research-based practice for students with autism based on two methodologically sound group studies across three participants with autism, and a research-based practice for students with learning disabilities based on three methodologically sound group studies across 435 participants with learning disabilities (NTACT, 2016).

The SDLMI is based on the component elements of self-determination, research on self-regulation, and student-directed learning (Wehmeyer et al., 2000). The model is designed to be implemented across curricular areas with diverse populations of students. Efficacy of the model has been established for students with severe disabilities (Agran, Blanchard, & Wehmeyer, 2000; Agran, Cavin & Palmer, 2006; McGlashing-Johnson, Agran, Sitlington, Cavin, & Wehmeyer, 2003), intellectual disabilities (Agran et al., 2006; Agran & Wehmeyer, 2000; Wehmeyer et al., 2000), learning disabilities (Shogren et al., 2012; Wehmeyer et al., 2000), emotional disabilities

(Kelly & Shogren, 2014; Wehmeyer et al., 2000), and autism (Agran et al., 2006). Although most of the research on the SDLMI included students in middle and high school, efficacy has also been found for students in elementary school (Palmer & Wehmeyer, 2003).

A recent study on the SDLMI (Kelly & Shogren, 2014) examined the effect of the SDLMI on on-task and off-task behaviors of students with emotional disabilities. Students were instructed in the SDLMI and then videotaped in the general education curriculum multiple times a week to measure on-task behavior (individually defined for each student). All four students in the study increased on-task behaviors and decreased off-task behaviors after they had received instruction in self-determination. Additionally, they were able to generalize and maintain these skills after instruction was completed (Kelly & Shogren, 2014).

In a study of high school students with intellectual disability (30%) or learning disability (70%), the SDLMI intervention group (n = 173) showed a significantly higher rate of goal attainment when compared to a control group (n = 139; Shogren, Palmer, Wehmeyer, Williams-Diehn, & Little, 2012). Research on the SDLMI found that it is effective to support goal attainment in academic and transition-related goals (Agran et al., 2006; Agran & Wehmeyer, 2000; Shogren et al., 2012; McGlashing-Johnson et al., 2004; Wehmeyer et al., 2000) and access to the general education curriculum (Shogren et al., 2012).

Another instructional model, the *Steps to Self-Determination Curriculum*, (Field & Hoffman, 1996) is another example of a curriculum to support the self-determination skills of students. This 18-session curriculum was designed to be implemented for students with or without disabilities (Field & Hoffman, 2002). The implementation of the curriculum is also flexible, allowing application in multiple settings, as a stand-alone activity, within other coursework, and a variety of scheduling arrangements. Field testing was completed in diverse

school settings, revealing a significant increase in self-determination, an increase in locus of control, and a decrease in depressive features for students who completed the curriculum (n = 77; Hoffman & Field, 1995). When compared to a control, a group of students who used the *Steps* curriculum showed a significant increase (p = .002) in correct responses on the Self-Determination Knowledge Scale with a large effect size of 1.02 (Field & Hoffman, 2002). A pretest-posttest measure also showed a significant increase (p = .000) in self-determined behaviors of students receiving instruction in *The Steps* curriculum when compared to a control group (Field & Hoffman, 2002).

The flexibility of *The Steps* curriculum provides the ability for educators to adapt instruction in self-determination to the needs of their students and environment. Field & Hoffman (2002), the authors of the *Steps to Self-Determination Curriculum*, state that self-determination instruction is important for all students and is best implemented within a class that addresses similar target behaviors and knowledge. They suggest curriculum mapping as one method for identifying opportunities for alignment of self-determination instruction with the existing coursework (Field & Hoffman, 2002).

Another intervention is the TAKE CHARGE model (Powers, Sowers, Nesbitt, Knowles, & Ellison, 1996), a multiple component approach to self-determination. Powers et al., 2001 found that adolescents showed an enhancement in their psychosocial adjustment, empowerment, and level of accomplishment after exposure to the model. A longitudinal, experimental study with foster care youth found that the TAKE CHARGE curriculum increased levels of self-determination, quality of life, employment, high school completion, and independent living, with medium to large effect sizes (Powers et al., 2012). The multicomponent approach of the TAKE CHARGE model was shown to be effective in supporting self-determination skills.

Copeland, Hughes, Agran, Wehmeyer, & Fowler (2002) also found that a multicomponent intervention package was effective at increasing self-determination skills for students. The intervention components were (a) modification of teacher-assigned worksheets, (b) instruction in assignment completion, (c) instruction in self-monitoring of classroom performance skills, (d) including students in setting performance goals, and (e) instruction in goal-evaluation (Copeland et al., 2002). Implementation of the model successfully increased worksheet completion tasks for students with intellectual disabilities. The researchers concluded that with appropriate instruction, students with intellectual disabilities can increase their skills in the classroom with direct instruction in self-monitoring and goal evaluation (Copeland et al., 2002). These skills included worksheet completion, self-monitoring steps performed, and goal-evaluation steps performed. In addition to research on multicomponent interventions to support self-determination, the following literature reviews have summarized the results of numerous studies on a variety of curriculum and models.

Algozzine, Browder, Karvonen, Test, & Wood (2001) conducted a comprehensive review of self-determination literature. They included 22 studies in their review, conducting two metanalyses on studies with group and single designs. The studies included students with traumatic brain injury, health impairments, intellectual, learning, emotional, developmental, hearing, visual, speech and language, and multiple disabilities, with the majority of participants having an intellectual or learning disability. The average effect size across the group design studies was 1.38, showing a large effect. They identified three studies with the largest effect sizes (Cross et al., 1999; Powers et al., 2001a; & Powers et al., 2001b). The three studies with the largest effect sizes targeted four or more areas of self-determination and provided

interventions over a longer period of time, while those with lower, but still strong, effect sizes targeted three or fewer component areas of self-determination.

The findings of Algozzine et al. (2001) are similar to that of Copeland, Hughes, Agran, Wehmeyer, and Fowler (2002) and Powers et al. (1996) showing multicomponent approaches to teaching self-determination are effective. Interestingly, this may provide additional support for the theoretical construct of self-determination as interventions that were more comprehensive in the inclusion of multiple components of self-determination showed larger effect sizes. Izzo and Lamb (2002) used the analogy of an umbrella to exhibit the effectiveness of multicomponent implementation of self-determination, describing how all of the components of self-determination must be strong to support independence and achievement in individuals, just as all spokes of an umbrella must be strong to protect one from the rain.

Based on the two metanalyses, Algozzine et al. (2001) identified three conclusions. First, there is evidence that some self-determination skills can be taught to some populations of students with disabilities. Most of the studies included in the metanalysis focused on teaching choice-making to individuals with intellectual disabilities or teaching self-advocacy to individuals with learning or intellectual disabilities. Second, there was evidence that individuals with intellectual disabilities can learn to make choices, solve problems, and self-advocate. Lastly, self-determination makes a difference in the lives of individuals with disabilities.

Self-determination instruction has also been shown to be effective for students with severe disabilities. In the IDEA (2004), multiple disabilities refer to "concomitant impairments (such as intellectual disability-blindness, intellectual disability-orthopedic impairment, etc.). In a review of five studies of self-determination of students with severe disabilities, Shin and Stroup-Rentier (2013) found that all study participants (n = 18) showed an increase in the target skills

associated with self-determination. Despite the established positive outcomes for students with severe disabilities, many educators do not believe that instruction in self-determination would benefit students with severe cognitive disabilities (Wehmeyer, 2000). This perception may result from the presumption that self-determination requires that an individual perform behaviors independently without support (Wehmeyer, 2000). Individuals with severe disabilities can still benefit from learning how to be more self-determined with the appropriate supports.

Chambers et al. (2007) conducted a literature review of studies on measures of global self-determination, a measure of students' total skill in self-determination. At the time of publication, previous literature reviews had completed summaries of studies on component elements of self-determination and student involvement in education planning. This review included 31 articles that were intervention or descriptive studies, studies of perceptions of self-determination, and efficacy of interventions to promote self-determination that implemented global measures of self-determination. Chambers et al. (2007) summarized that the articles reviewed provided evidence that greater levels of self-determination contributed to positive post-school outcomes (i.e., financial independence, employment, & quality of life), people with disabilities rated self-determination higher than educators or family members, there was a gap between knowledge of self-determination and implementation of interventions, environmental factors may have influenced teachers' perceptions, and the majority of studies indicate that interventions improve global levels of self-determination.

Naumann (2017) also completed a literature review of instruction in self-determination and its effect on post-school outcomes. Six of the studies reviewed focused on self-determination as a predictor for positive post-school outcomes and, overall, showed positive outcomes, including higher levels of employment, community access, and a stronger desire to

live independently. An additional five studies focused on curriculum designed to increase self-determination. Naumann (2017) identified three studies that show self-determination improves post-school outcomes for students with disabilities (Powers et al., 2012; Wehmeyer et al., 2012; Wehmeyer et al, 2013). In these studies, students who received instruction in self-determination showed increased levels of self-determination, increased quality of life, higher rates of high school graduation, college enrollment, and higher employment rates (Naumann, 2017).

Foster youth receiving special education services (n = 69) who received instruction in the TAKE CHARGE curriculum completed high school, were employed, and carried out independent living activities at higher rates than a control group. In a 5-year longitudinal study using multiple evidence-based strategies to support self-determination, Wehmeyer et al. (2013), found significant positive gains for students (n = 371) in self-determination from pre to post assessment. Most of the students in this sample (n = 267) had learning disabilities. In a study of 312 high school students with cognitive disabilities, Wehmeyer et al. (2013) also found positive effects of self-determination instruction. Students who received instruction in the SDLMI showed significant gains from pre to post assessment over 2 years within groups and the experimental group increased self-determination at a much higher rate. From the findings of these studies, Naumann (2017) concluded that self-determination skills are beneficial to individuals, providing a more positive approach to education for individuals with disabilities to help them become as fulfilled and successful as possible.

Recently, Raley, Shogren, Mumbardó-Adam, Simó-Pinatella, and Giné (2018) conducted a literature review to update the findings of Algozzine et al. (2001) with the most currently available curriculum on self-determination. Seven articles were identified that reported on the self-determination outcomes published between 2000 to 2016 (Raley et al., 2018). All of the

studies included students with disabilities, including intellectual disability, autism, learning disabilities, emotional disabilities, attention deficit and/or hyperactivity disorder, speech and language impairments, and other health impairment. Most of the curricula were implemented in segregated settings, including special education classes, an 18-21 program, and a community college setting. They showed overall positive efficacy of self-determination interventions (Raley et al., 2018).

The *Whose Future is it Anyway* (*WFA*; Wehmeyer et al., 2004) curriculum was the most frequently implemented in recent studies, utilized in five of the studies in Raley et al.'s (2018) literature review. Studies implementing the WFA curriculum found significant improvements in self-regulation and significant increases in self-determination scores. Additional curricula included the *Choicemaker Curriculum* (Martin, Marshall, & Maxson, 1994)*, Steps to Self-Determination* (Hoffman & Field, 2005)*,* the *Next S.T.E.P Curriculum* (Halpern, Herr, Doren, &Wolf, 2000), and the *Self-Advocacy Strategy* (Van Reusen, Bos, Schumaker, & Deshler, 2002). Wehmeyer (2013) found improvements in students' self-determination scores over a three-year period after implementation of all five curricula when compared to a control group. Raley et al. (2018) found that curriculum on self-determination has not been a focus of recent research, proposing that stand-alone intervention models for self-determination may not be the best option to teach self-determination skills in inclusive settings. Although these instructional models have been shown to improve self-determination skills, most studies have been conducted in special education settings, rather than inclusive classrooms (Raley et al., 2018). As discussed later in this chapter, self-determination instruction needs to be studied and implemented as an integrated strategy within the general education curriculum to best support all students.

Overall, the findings from studies on instruction in self-determination and related literature reviews demonstrate that self-determination can be taught to students. Multicomponent interventions were the most effective, showing that when more components of self-determination are included with instruction, they are more effective in increasing students' levels of self-determination and associated outcomes (Cobb, Lehmann, Newman-Gonchar, & Alwell, 2009).

Halloran and Simon (1995) proposed that educators should not assume that self-determination skills would naturally develop over time, but rather as a result of purposeful strategies. Furthermore, Wehmeyer and Schalock (2001) determined that "promoting self-determination as an educational outcome will require a purposeful instructional program, one that coordinates learning experiences across the span of a student's educational experience" (p. 4). Educators should not assume that students' self-determination skills would develop without intervention. Targeted instruction is critical to increase students' levels of self-determination and support positive outcomes in a variety of areas. Many research studies have shown that this type of targeted instruction increases students' levels of self-determination and is correlated with positive outcomes for students.

Self-Determination and Post-School Outcomes

Self-determination has been identified by many researchers as best practice in transition related services (Field, et al., 1998; Shogren, 2013; Shogren et al, 2016; Wehmeyer et al., 2003; Wehmeyer et al., 2007), the goal of education (Halloran, 1993; Field et al, 1998), and the foundation for effective citizenship (Abery, et al., 1995; Denney & Daviso, 2012; Martin, Morehart, Lauzon, & Daviso, 2013; Wehmeyer & Schwartz, 1997). It is a "critical educational domain for promoting effective transition from school to post school life" (Wehmeyer, 2004, p. 341). Educators agree with the research and most believe instruction in self-determination will

improve post-school outcomes (Agran, et al., 2007; Wehmeyer, Agran, & Hughes, 2000). Research provides evidence to support these beliefs. Multiple literature reviews have been conducted to examine the effect of self-determination on student outcomes.

Self-determination has been identified as a best practice in education for individuals with disabilities (Wehmeyer et al., 2004). Test et al. (2009) conducted a literature review and found that there was evidence that students could enhance post-school outcomes in education and employment with self-self-advocacy and self-determination skills. The literature review included 22 studies with 26,480 total participants (Test et al., 2009). Five studies included sample populations including all disability categories (i.e., learning disability, intellectual disability, epilepsy, brain injury, physical disability, hearing disability, speech and language impairment, mental health, physical disability, & students without disabilities) and seventeen included only some disability categories. The National Technical Assistance Center on Transition (NTACT, 2016) updated this literature review (Test et al., 2009) on practices to improve post-school outcomes of students with disabilities. During this update, self-determination was identified as an evidence-based predictor of post-school success (Mazzotti et al., 2016; Test et al., 2009). Additional reviews focused on the specific outcomes supported by self-determination.

Fowler, et al., (2007) conducted a review of 11 studies that discussed the effect of self-determination intervention on academic outcomes. Samples were composed primarily of students with intellectual and developmental disabilities, but also included students without disabilities and students in other disability categories in special education and integrated settings. Across the 11 studies, self-determination interventions included self-management, choice-making, goal setting, self-advocacy, and multiple components. The effects of these interventions

on 18 academic variables (i.e., completed seatwork, following directions, verbal contributions in class, accuracy and fluency of assignments in multiple subjects) were analyzed using percentage of nonoverlapping data points (PND) to measure the strength of effects of single-subject interventions (Fowler, et al., 2007). Seven of the included studies contained data points that could be analyzed using the PND. Four of the seven studies exhibited PNDs above 90% and the median PND of the seven studies was 85%, indicating very strong results. Similar to previous studies (Algozzine et al., 2001; Copeland et al., 2002, & Powers et al., 1996), Fowler et al. (2007) found that combined strategies were most effective, although one study focused on choice-making showed powerful effectiveness on academic productivity and accuracy. Based on the results of these studies, Fowler et al. (2007) concluded that self-determination interventions can improve academic outcomes for students.

A study in Taiwan also found a correlation between self-determination skills and academic performance of students with disabilities (Chao & Chon, 2017). Self-determination instruction was measured using The Teaching Self-Determination Scale (TSDS) and academic performance of students with disabilities (n = 106) in self-contained classrooms was measured using the Basic Learning Competency Assessment (BLCA). A stepwise multiple regression and Pearson Correlation analyses showed a positive correlation between self-determination instruction and academic performance. Educators' self-determination instruction accounted for 26% of the total variance of students' academic performance. Specifically, psychological empowerment and autonomy skills predicted 21.9% of the total variance of the students' academic test results (Chao & Chon, 2017). Although correlational, this study shows the possible efficacy of instruction in essential characteristics of self-determination across cultures in academic outcomes (Chao & Chon, 2017).

Martin et al. (2003) also found that self-determination contracts were an effective method to teach students to self-regulate academic outcomes. In a study of eight students with emotional and behavioral difficulties, Martin et al. (2003) found that students who completed a two page self-determination contract increased their correspondence between the academic work schedule identified in the self-determination contract and actual achievement of those goals in four variable areas: plan and work, work and evaluation, evaluation and adjustment, and adjustment and the next day plan. One-way repeated ANOVAs indicated significant effects for all areas (Martin et al., 2003). A paired sample *t*-test also revealed significant differences between students' preintervention and postintervention Woodcock-Johnson academic performance areas ($p < .001$; Martin et al., 2003). Self-determination contracts assisted students in accurately planning their work schedules and improved academic performance. In addition to positive outcomes in academic skills, self-determination is also correlated with successful employment and life outcomes.

Several studies have correlated component behaviors of self-determination with positive employment outcomes. In a survey of 338 transitioning youth with intellectual and developmental disabilities 18 months after exiting high school, Simonsen and Neubert (2012) found that five variables significantly predicted that the youth would be engaged in community work in a logistic regression model. These variables included family expressed preference for paid work in the community ($\chi^2 = 24.03$, $p < .001$), paid work during secondary school ($\chi^2 = 9.68$, $p = .010$), self-management skills ($\chi^2 = 6.26$, $p = .050$), community mobility skills ($\chi^2 = 6.16$, $p = .070$), and race/ethnicity ($\chi^2 = 6.03$, $p = .072$). Self-management, a component of self-determination, was one of the variables that contributed to youth being employed in the community after high school.

Irvine, Erickson, Singer, and Stalhberg (1992) showed that students who participated in a self-management system exhibited an increase in initiation of job tasks at school and home settings. Four high school students with intellectual disabilities were taught to use picture schedules to initiate a series of behavioral tasks upon arriving at school each morning and complete chores at home. Participants were able to use self-management, a component of self-determination, to successfully initiate tasks at home and in school. They were 100% successful using the strategy and maintained their progress at a one-month follow-up. Lastly, Fornes, et al. (2008) found that self-determination was a significant predictor of job performance, job satisfaction, and job retention outcomes for individuals with intellectual and developmental disabilities. Two scales were used to measure job performance and job satisfaction of these variables: (a) The Jobs Observation Behavior Scale: Opportunity for Self-Determination and (b) The Job-in-General (JIG) Scale. Job retention was measured by the number of months the participant was employed continuously at the same job. Using the ARC self-determination scale, Fornes et al. (2008) found that the measure of self-determination accounted for 24% of the variance of the job retention scale, 33.5% of the variance in job performance, and 24.4% of the variance in job retention in regression models.

Gerber, Ginsberg, and Reiff (1992) interviewed seventy-one adults with learning disabilities and identified behaviors exhibited by adults who were more successful. These behaviors included important elements of self-determination such as having control of their lives and surroundings and well-thought out goals, important elements of self-determination. Additionally, Shogren, Wehmeyer, Palmer, Rifenbark, and Little (2015) found that self-determination was correlated with positive, post-school outcomes. Seven hundred and seventy-nine students with disabilities who received instruction in self-determination in secondary school

had more positive outcomes in achieving employment and community access 1-year post-school (Gerber et al., 1992). Scores of self-determination significantly predicted community access and employment.

Shogren et al.'s (2015) study showed that instructional interventions in high school led to higher levels of self-determination as students transition out of school and that this higher level of self-determination results in more positive post-school outcomes. Research on longitudinal data further supports Shogren et al.'s (2015) assertation that higher levels of self-determination result in positive outcomes.

Shogren, Villarreal, Lang, & Seo (2017) used data from the National Longitudinal Transition Study-2 (NLTS2) to examine the role of self-determination constructs in post-school outcomes. The NLTS2 data included direct assessment of three of the four essential characteristics of self-determined behavior (i.e., autonomy, psychological empowerment, and self-realization). Shogren et al. (2017) found that self-determination is a statistically important intermediary factor in understanding the interaction between school-based factors and post-school outcomes for students with disabilities. Supporting autonomy, psychological empowerment, and self-realization is central to the achievement of positive post-school outcomes through school interventions (Shogren et al., 2017).

The large collection of studies connecting positive post-school outcomes to self-determination include various populations of students, diverse methodologies, and multiple outcome measures. "An enormous amount of research shows the importance of self-determination (i.e., autonomy) for students in elementary school through college for enhancing learning and improving important post-school outcomes" (The American Psychological Association, 2012, para. 1). Research shows that students with higher levels of self-

determination or its component elements are more likely to be engaged in employment with higher pay (Clarke, 2008; Field & Hoffman, 2002; Martorell, Gutierrez-Recacha, Pereda, & Ayuso-Mateos, 2008; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997), have increased independence (Powers et al., 2012; Shogren, Lee, & Panko, 2016; Wehmeyer & Palmer, 2003), have positive postsecondary education experiences (Berry, et al., 2012; Halpern, et al., 1995; Izzo, Hertzfeld, & Aaron, 2001; Shogren, Lee, & Panko, 2016; Test, et al., 2013), enhanced leisure participation (Dattilo & Rusch, 2012) and have a higher quality of life (Lachapelle et al., 2005; Wehmeyer & Schwartz, 1998). Shogren and Ward (2018) emphasized that self-determination should be central to efforts to promote positive post-school outcomes, stating:

> Enabling people with disabilities to self-direct their own lives and careers should be a goal for disability supports and services across the lifespan both because of the inherent right of all people to be self-determining as well as the clear and compelling evidence that promoting self-determination makes a difference in outcomes. (p. 193)

Overwhelming evidence shows that self-determination supports positive outcomes in all areas of life. Arguably, it is a key factor in the success of all students, including students with disabilities and should be an essential component in the general education curriculum.

Self-Determination Instruction in General Education

Teaching self-determination to students is important for both general and special educators (Martin et al., 2013). As described earlier in this chapter, most students with disabilities spend at least some of their time in general education programs (Wagner, et al., 2003). Estimates indicate that students with disabilities, on average, receive 80% of their instruction in general education classrooms (Wehmeyer, Field, Doren, Jones, & Mason, 2004).

According to the National Center for Educational Statistics (2019), students with speech language impairment show the highest proportion of students who spend 80% or more of their time in general education classes (86.9%) while students with multiple disabilities show the lowest proportion of students who spend 80% of more of their time in general education classes (13.1%; NCES, 2019). In eight categories of disabilities, over 50% of students spend 80% or more of their time in general education classrooms (developmental disability, hearing impairment, orthopedic impairment, other health impairment, specific learning disability, speech and language disability, traumatic brain injury, and visual impairment; NCES, 2019). Less than 50% of students with autism, deaf-blindness, emotional disability, intellectual disability, and multiple disabilities spent 80% or more of their time in general education classes (NCES, 2019).

Wehmeyer et al. (2004) surmised that self-determination can be taught within the general education curriculum. Infusion of self-determination instruction into the general education curriculum can create a more efficient delivery of these skillsets and increase access to the curriculum for students with disabilities (Agran, Blanchard, Wehmeyer, & Hughers, 2002; Izzo & Lamb, 2012; Palmer, Wehmeyer, Gipson, & Agran, 2004). Fowler et al. (2007) suggested that providing self-determination within the general education curriculum could address the difficulty educators have in finding time to provide instruction in these skills (Agran, Snow, & Swaner, 1999; Grigal, et al., 2003; Wehmeyer, Agran, & Hughes, 2000).

Much of the research on educators' perspectives of self-determination has been gathered from special educators (Agran et al., 1999; Agran, et al., 2007; Carter, Lane, Pierson, & Stang, 2008; Cho, Wehmeyer, & Kingston, 2013; Thoma et al., 2002; Wehmeyer et al., 2000), but most students with disabilities receive instruction and support from general educators, related service personnel, and administrators. It is important to gather the perspectives of these educators to

support effective instruction of self-determination throughout the general curriculum. Self-determination should be taught to all students (Denney & Daviso, 2012; Wehmeyer et al., 2004) and studies have shown that there are effective curricular methods intended to be integrated into the general education curriculum (Izzo & Lamb, 2002, e.g., SDLMI).

Educators' Perspectives of Self-Determination

Beginning in 1990s, the United States Office of Special Education Programs funded 26 projects to promote self-determination (Wehmeyer, 2015). As a result of these projects and additional research, self-determination is now recognized as a variable that supports positive post-school outcomes for students with disabilities (Agran, et al., 1999; Berry, et al., 2012; Mazzotti et al., 2016; Shogren et al., 2015; Test et al., 2009; Wehmeyer, 2015; Wehmeyer & Schwartz, 1997). Although it is widely accepted as an important component of supporting students' futures, self-determination is not being taught in the classroom or included in Individualized Education Programs (IEP; Agran et al, 1999; Mason, Field, & Sawilosky, 2004; Wehmeyer et al., 2000). To address this implementation gap, a branch of research on self-determination has focused on identifying educators' perspectives on self-determination.

Educators' beliefs and perspectives are an important element in student learning (Santos & Miguel, 2019). Although some research has not shown a direct link between teacher beliefs and practices (Levitt, 2001; White, 2000; Wilcox-Herzog, 2002), many researchers still consider it an important factor affecting pedagogical decisions in the classroom (Levin, 2014; Santos & Miguel, 2019; Wall, 2018). Bandura (1997) posited that beliefs guide our goals, decisions, actions, and reactions. The collection of survey research on perspectives of self-determination reveals important views held by educators.

Several surveys have been used to explore educators' views of self-determination. Agran et al. (1999) surveyed a sample of educators who attended the Inclusion Conference held in Salt Lake City,

Utah. Sixty-nine special educators from various grade levels completed a survey on their values of self-determination and strategies to promote it (Agran et al., 1999). Almost all respondents (91%) conveyed that self-determination is primarily concerned with choice-making and was the component taught most often (Agran et al., 1999). Self-monitoring, goal setting, problem-solving, and self-reinforcement were also noted by most of the educators as components of self-determination. Although self-determination was rated as an important area to include in the curriculum, most respondents stated that self-determination skills were not included on the students' Individual Education Program documents. They also reported a low level of instruction in each component of self-determination (Agran et al., 1999).

Wehmeyer et al. (2000) replicated Agran et al.'s (1999) study with an additional sample of educators from a TASH mailing list (previously known as The Association for Persons with Severe Handicaps) and subdivisions of the Council for Exceptional Children. There were 1,219 respondents from all 50 states and two U.S. territories who served transition-age students (Wehmeyer et al., 2000). Participants completed an expanded version of the Agran et al. (1999) survey, further developed by the functional model of self-determination proposed by Wehmeyer et al. (1999). Most respondents reported they were familiar with the term, self-determination, with the majority reporting that had learned of the term from either professional journals or a conference or workshop (Wehmeyer et al., 2000). Of the seven instructional domains, decision making, problem solving, and choice making received the highest mean rankings for level of importance (Wehmeyer et al., 2000). In all domain areas, except choice-making, teachers who worked with students with more severe disabilities rated instruction in the self-determination domain areas as less important than did teachers of students with mild disabilities (Wehmeyer et al., 2000). Although 22% of educators reported that all their students had goals relating to self-determination on their IEP documents, 31% reported none of their students had such goals (Wehmeyer et al., 2000). Wehmeyer

et al. (2000) concluded that although most teachers perceived self-determination as important, this may not be translating to instructional activities to promote self-determination.

Thoma, et al. (2002) surveyed special educators to ascertain their familiarity with self-determination, how to facilitate student self-determination, and the importance of the core competencies of self-determination. Forty-three special education teachers from five southwestern states participated in the study (Thoma et al., 2002). Seventy-five percent of the respondents reported familiarity with self-determination, but 67% also reported that the training they received in how to provide instruction in self-determination was inadequate (Thoma et al., 2002). Most of the educators stated that it was very important to include information on instruction of self-determination in preservice or graduate programs (Thoma et al., 2002). Despite this level of importance, none of the educators had learned how to implement a specific student-centered or self-determination instructional program during their coursework and 58% of the educators reported that none of their students had self-determination activities included in their annual goals (Thoma et al., 2002). When asked about the feasibility of implementing self-determination in IEP meetings, over half of the educators reported that they had never attempted it or wouldn't know how to implement it (Thoma et al., 2002). Correlational analyses revealed no significant relationships between teachers' reported skills in supporting self-determination and each of the following factors: years of teaching, disability group taught, or degrees earned (Thoma et al., 2002). Overall, Thoma et al. (2002) concluded that although educators view self-determination as important, they do not have the appropriate training to effectively implement instructional strategies to support the self-determination of their students.

Grigal, et al., (2003) studied the views educators and teachers have of self-determination and conducted extensive analyses. The population of educators studied included both general

and special educators in various programs. The sample included 248 teachers who taught high school students in two urban school districts in mid-Atlantic states. They found that teachers slightly agreed that they were familiar with the concept of self-determination and that students with disabilities had opportunities to learn and practice self-determination skills (Grigal et al., 2003).

Grigal et al. (2003) found significant interactions in responses based on four factors: incidence of disability, type of teacher, type of instructional program, and teaching experience. First, Grigal et al. (2003) found significant differences between groups of educators who served students with high incidence disabilities and educators who served students with low incidence disabilities. For educators who served students with high-incidence disabilities, special education teachers were more likely to believe that they were familiar with self-determination and how to teach it than general educators serving the same population of students (Grigal et al., 2003).

These teachers also differed in their level of familiarity of self-determination based on type of instructional program. Educators who served students with high-incidence disabilities differed on their familiarity of self-determination based on the program in which they provided instruction. Educators who served students with high incidence disabilities in community-based/life skills programs were more likely to believe that they were familiar with self-determination and how to teach it than were educators serving similar students in college preparation/career technology programs (Grigal et al., 2003).

Further analysis indicated teachers in college preparation/career technology programs differed in their self-reported level of familiarity of self-determination based on their certification: special education or general education (Grigal et al., 2003). Special education

teachers who taught in college preparation and career technology programs were more likely to believe that they were familiar with self-determination and how to teach it than were general educators who taught in similar programs (Grigal et al., 2003).

Testing for interaction between teaching experience and the population of students taught, Grigal et al. (2003) found differences on teacher's level of familiarity of self-determination. Based on experience level, teachers differed on their familiarity of self-determination depending on their certification and population of students taught. Amongst more experienced teachers (> 10 years), teachers who taught students with high-incidence disabilities were more likely to report they were familiar with self-determination. Amongst less experienced educators (< 10 years), special educators were more likely to believe students with disabilities had the opportunity to practice and learn self-determination skills. For educators who served students with low incidence disabilities, teachers who were less experienced (< 10 years), were more likely to report they were familiar with self-determination (Grigal et al., 2003). For general educators, those with more experience (> 10 years) were more likely to believe that students with disabilities had the opportunity to learn and practice self-determination skills (Grigal et al., 2003). In this study, educators showed significant differences in their perspectives on self-determination based on several factors and interactions.

Grigal et al. (2003) surmised that many of these differences between teachers result from varied content in preservice programs and the nature and focus of the instructional programs of the teachers. Similar to other studies, Grigal et al. (2003) concluded that although survey results show educators believe self-determination is important, self-determination instruction in schools is not optimal.

Agran , Hong, and Blankenship, (2007) found educators of the blind and visually handicapped rated self-determination as a critical skill for their students. An adapted version of the survey used by Agran et al. (1999) and Wehmeyer et al. (2000) was completed by 187 teachers of the blind and visually handicapped. The sample included participants from 40 U.S. states, 1 U.S. territory, and Canada. Although two thirds of the teachers reported providing some instruction in self-determination, 27% reported none of their students had goals relating to self-determination on their IEP documents (Agran et al., 2007). Of the components of self-determined behavior, problem-solving was rated the highest and choice-making was rated the lowest (Agran et al., 2007). Similar to findings by Wehmeyer et al. (2000), the majority of respondents were familiar with the term self-determination with the primary source of familiarity being journal articles or conferences or workshops (Agran et al., 2007).

Mason, et al. (2004) and Carter, et al. (2008) included general educators to study perspectives of self-determination, and again, replicated that self-determination is seen as important. The sample of educators from the Mason et al. (2004) study included a wide range of positions, including special education teachers, general education teachers, administrators, related service professionals, teacher education students, and staff at institutions of higher education that spanned all grade levels and represented all 50 states, Australia, the Bahamas, Canada, and Kenya. Participants were invited to participate through the Council for Exceptional Children's mailing list, an association for special educators. As a result, most of the respondents were special educators (77%). Mason et al. (2004) reported that most respondents reported dissatisfaction with their district's approach to self-determination, replicating previous findings that instruction in self-determination is not optimal (Agran et al., 1999; Agran et al., 2007; Grigal et al., 2003; Wehmeyer et al., 2000).

Carter et al. (2008) built on the survey work by Wehmeyer et al. (2000) which invited educators to rate each of the instructional domains associated with self-determination for level of importance. This

study (Carter et al., 2008) expanded the Wehmeyer et al. (2000) survey to include educators' responses on their level of instruction in each instructional domain and the responses of general educators. Three hundred and forty responses from three school districts in southern states were analyzed. Overall, educators rated all seven of the component elements of self-determined behavior as moderately to highly important (Carter et al., 2008). Most of the sample rated problem-solving, self-management/self-regulation, decision-making, and goal setting and attainment as very important. Similar to previous studies (Agran et al., 1999 & Wehmeyer et al., 2000), problem-solving was rated significantly higher than all other domains (Carter et al., 2008). Educators also reported teaching this component most often (Carter et al., 2008). Additionally, self-management/self-regulation and decision-making were rated significantly higher than choice-making, self-advocacy/leadership, and self-awareness/self-knowledge. Goal setting was rated significantly higher than self-advocacy/leadership and self-awareness/self-knowledge (Carter et al., 2008). There were strong, positive relationships between the level of importance attributed to each domain and the level of instruction. Significant positive correlations were found for all seven components of self-determination: choice making ($r = .75,\ p < .001$); decision making ($r = .74,\ p < .001$); problem solving ($r = .76,\ p < .001$); goal setting and attainment ($r = .72,\ p < .001$); self-advocacy and leadership ($r = .75, p < .001$); self-management/self-regulation ($r = .71, p < .001$); and self-awareness/self-knowledge ($r = .72, p < .001$; Carter et al., 2008). All mean ratings of instruction were also slightly lower than ratings of importance in each of the seven component areas (Carter et al., 2008).

In comparing the perspectives held by general and special educators, Carter et al. (2008) found that special educators rated instruction in self-advocacy/leadership skills, and self-awareness/self-knowledge as significantly more important than rated by general educators. A one-way MANOVA indicated a significant multivariate effect for program type, Wilks's Lambda = 0.95, $F(7, 298) = 2.18$, $p = .04$, accounting for 5% of the explained variance (Carter et al., 2008). Carter et al. (2008) also explored the

extent to which skill instruction in each area of self-determined behavior differed across curriculum areas. Educators teaching in both academic and elective classes rated the level of importance and how often they provide instruction as significantly higher than educators exclusively teaching academic classes in the areas of choice-making and decision-making (Carter et al., 2008). A one-way MANOVA revealed a significant multivariate effect for curricular area, Wilks's Lambda = 0.92, F (14, 608) = 1.76, p = .04, accounting for 8% of the explained variance (Carter et al., 2008). Similar to Grigal et al. (2003), these findings show that there are some differences in educators' perspectives and levels of instruction in self-determination based on demographic factors, including instructional program.

Cho (2009) identified similar perspectives with elementary school educators. He studied survey responses of 407 general and special educators who taught students in grades kindergarten through sixth grade in 28 different states. Cho (2009) adapted the survey used by Wehmeyer et al. (2000) to include a rating scale for frequency of instruction of each component element of self-determination. Survey results showed that educators assigned the highest importance to teaching goal setting and allocated the most instructional time to problem-solving (Cho, 2009). No differences between general educators and special educators were found in ratings of importance or frequency of instruction for any of the components of self-determination; however, a higher percentage of general educators (76.1%) reported being familiar with self-determination than special educators (58.3%; Cho, 2009). There were statistically significant, but weak relationships between the level of importance and the corresponding level of instruction in choice-making (r = .36, p < .001), self-awareness (r = .27, p < .01), self-advocacy, problem solving (r = .20, p < .01), and self-management (r = .15, p < .01). Cho (2009) also found unequal access to instruction of self-determination across educational settings. Educators emphasized different component elements

of self-determination based on classroom setting (i.e., general education room, self-contained room, resource room, or a combination of settings; Cho, 2009).

A number of studies from Korea have also examined educators' perspectives of self-determination. Two studies (Oh & Park, 2003; Yoo, 2003) replicated the findings of American studies (Agran et al., 1999; Carter et al., 2008; & Wehmeyer et al., 2000) revealing that although Korean special educators identified that self-determination was important, their level of instruction was rated lower. Similar to the studies completed in the United States, Korean studies have also focused on gathering the perspectives of special educators. Most recently, Seo (2014) included both special and general educators. The study surveyed 328 Korean elementary and secondary teachers on their ratings of importance and instruction of seven component elements of self-determined behavior. General and special educators rated high levels of importance for teaching choice-making, decision-making, problem-solving, goal setting and attainment, self-management & self-regulation, and self-awareness and self-knowledge. On a Likert scale, ranging from 1 (low) to 6 (high), both general and special educators showed a mean rating between 5 and 6 in all six of these components. The only component that was not rated with high importance was self-advocacy and leadership ($m = 4.89$).

Additional findings from Seo (2014) exhibited differences in levels of importance between groups of educators. For most areas, special educators reported higher levels of importance, except in the area of goal setting and attainment skills. Additionally, secondary teachers reported higher ratings of importance in all domains than their elementary colleagues. General education teachers reported providing instruction in self-determination much less often than special educators.

Taken as a whole, these survey studies provide a sampling of the perspectives of educators from different geographical regions and serving different populations of students. The majority of educators reported that they were familiar with the term self-determination (Agran et

al., 1999; Grigal et al., 2003; Wehmeyer et al., 2000) and identified the components of self-determination as important (Agran et al., 1999; Agran et al., 2007; Carter et al., 2008; Cho et al., 2013; Grigal et al., 2003; Mason, et al., 2004; Wehmeyer et al., 2000).

Educators' perspectives varied on some demographic and student characteristics, including disability group, classroom setting, and grade level. Carter et al. (2006) found educators of students with higher incidence disabilities are more likely to teach self-determination than their peers who serve students with higher support needs (Grigal et al., 2003; Lane, Carter, Pierson, & Glaeser, 2006; Shogren et al., 2017; Wehmeyer, Agran, & Hughes, 2000; Wehmeyer et al., 2012). High-incidence disabilities include emotional or behavioral disabilities, mild to moderate intellectual disabilities, learning disabilities, and speech and language impairments (Gage, Lierheimer, & Goran, 2012). Classroom setting and grade levels were also a factor in educators' perspectives. When compared to elementary colleagues, secondary school teachers reported that teaching self-determination is more important (Mason et al., 2004). Lastly, classroom setting revealed differences in perspectives. In a survey of special educators, Wehmeyer et al. (2000) found that educators working in an inclusive classroom environments rated teaching self-determination as more important than teachers in more restricted settings; however, they cautioned that this difference may also be due to the population of students served, as students with more severe disabilities are more likely to be served in more restrictive classroom settings.

The current studies on educators' perspective of self-determination reveal evidence that a variety of factors differentially influence the ratings of self-determination. This dissertation builds on this research by augmenting the populations of educators and the factors studied on educators' perspectives of self-determination.

Conclusion

Individuals with disabilities are playing increasingly integrated roles in their communities and their education. Since the 1980s, there has been a trend of increasing integration for individuals with disabilities. Unfortunately, with this move towards integration, individuals with disabilities are still not achieving positive adult outcomes at the same rate as their peers. Numerous studies over the past 30 years have shown that self-determination improves the outcomes of students in school and adult life. An additional body of research shows that instruction in self-determination can effectively increase levels of self-determination for diverse populations of students. Unfortunately, although there is a strong foundation of research to support the implementation of self-determination instruction in schools, many educators report that they are unfamiliar with self-determination and do not include self-determination in students' goals. Research on educators' perspectives of self-determination show that although educators rate the components of self-determination as important, they report a lower level of instruction. If the goal of education is to improve the post-school outcomes of students with disabilities, it will be important to understand the perspectives of all educators that support students with disabilities and provide instruction. Adding to the current body of research on educators' perspectives of self-determination is an important step to further knowledge on how to best increase the instruction of self-determination for students with disabilities.

CHAPTER THREE: METHODOLOGY

The researcher studied educators' perspectives and amount of instruction of self-determination through the collection of quantitative and qualitative survey data. As this was a mixed methods study, a biography of the researcher is included with the description of the setting and participants to support credibility of the study. This chapter also includes (a) the research design, (b) sampling procedure, (c) setting, (d) participants, (e) instrumentation, (f) data collection schedule, (g) research questions and hypotheses, (h) description and justification of the analyses, (i) threats to survey research, (j) quantitative limitations, (k) researcher biography, (l) trustworthiness, (m) and a statement of ethics.

Research Design

The researcher implemented a mixed methods survey design to examine educators' self-reported amount of instruction of the components of self-determination, their rating of importance of self-determination skills, and their perceptions about self-determination in their schools and classrooms. A convergent design was used in which quantitative and qualitative data were collected in parallel, analyzed independently, and synthesized (Creswell, 2014). Survey methodology provided an efficient process for gathering information from a larger number of participants and the ability to "test complex propositions involving several variables in simultaneous interaction" (Babbie, 1990, p. 41). Additionally, an online survey provided the ability for participants to respond at their convenience without time restraints in an easy-to-access format.

In this study, quantitative data were used to test whether demographic differences between educators predicted amount of instruction of the components of self-determination and the rating of importance of self-determination skills. Research Questions One and Two were

correlational in nature, while Research Question Three examined mean differences between groups of educators using a causal comparative design. The qualitative data were used to explore perceptions of educators on the benefits of self-determination and strategies to achieve it. This approach provided a more complete understanding of educators' perspectives of self-determination.

This study had an emphasis on the quantitative data collection including demographic characteristics and semantic differential scales of the ratings of importance and self-reported amount of instruction of the components of self-determination. The qualitative portion of this study was used to examine educators' perspectives of self-determination. Data were collected through a survey of educators in the Lower Hudson Valley of New York State. Survey research provides an appropriate method to gather data on the relationship between multiple variables (Babbie, 1990). In this study, survey research provided a practical approach to gathering a large enough sample to analyze the variables that predict educators' amount of instruction and perspectives of self-determination.

Description of the Sampling Procedure, Setting, and Participants

Sampling Procedure

A sample of convenience targeted a population of educators throughout the Lower Hudson Valley of New York State. As the goal of this study was to expand the current research in this area, sampling procedures were designed to encourage responses from a diverse range of educators. All certified educators in the Lower Hudson Valley of New York State were targeted. The survey was available in an online and paper-based format. Additionally, participants were offered a small incentive to increase the response rate. After completion of the survey,

participants were provided the option to enter a raffle for a gift card. Raffle entries were gathered through a separate survey link to maintain the confidentiality of the survey responses.

The survey distribution occurred in two waves. In the first wave, all superintendents and heads of school in the tri-county (Westchester, Putnam, & Rockland) region were contacted for permission to distribute the survey to the personnel in their districts. Initial contact was made through an e-mail with a description of the study and potential benefits. If there was no response to the initial contact, additional e-mail and phone reminders were implemented. Seventy-four superintendents and heads of school were contacted. Twenty-two responses were received, five of which stated they would not participate in the survey distribution. The remainder of those contacted did not respond to any of the multiple inquiries. For the 16 affirmative responses, the researcher provided the choice of paper or digital participation. Only one school requested paper-based versions; however, this school stopped responding to requests to schedule distribution. The researcher provided an e-mail introduction and link to the survey to the remaining 15 districts and schools to be forwarded to the educators in each school/district. Two superintendents or heads of school did not distribute the survey to educators in their school/district after agreeing to do so. Thirteen districts or schools successfully distributed the survey to the educators. The schools or districts in the first wave of distribution spanned two counties, consisting of one Board of Cooperative Educational Services; one approved, out-of-district school (schools that provide programs for students with disabilities); two urban districts; two rural districts; and seven suburban districts. A total of 274 individuals accessed the survey link in wave one with 165 completed responses. The initial invitation letter to superintendents and e-mail introduction for participants are included in Appendices A and B.

The second wave of the survey was distributed directly through multiple online venues, including social media posts, blog posts, and local e-mail distribution lists. Members of the distribution lists are educators throughout the Lower Hudson Valley of New York State who have provided their names and contact information to receive information related to education (e.g., distribution lists for transition planning and guidance counselors). Social media postings included blogs and online groups targeted to education (e.g., Teachers' Association Facebook pages). Through the second wave of distribution, 230 individuals accessed the survey link with 155 completed surveys. The respondents spanned all three counties in the Lower Hudson Valley with a diverse representation of districts and educators.

Setting

The Lower Hudson Valley Region of New York State spans three counties: Westchester, Rockland, and Putnam. The schools and districts in this region are diverse and range from PreK-12. The public-school districts range from rural (207 students) to one of the "big 5" city school districts (> 25,300 students). The populations in these schools exhibit a range of socioeconomic status and levels of achievement. In addition to the public-school districts, this region includes 27 approved, out of district school placements. These placements consist of public and private schools that provide day and residential programs for students with disabilities, including the School for the Deaf. Overall, this region consists of a diverse population of schools and educators.

Participants

The targeted population of this study consisted of educators employed full-time in a local educational agency that is certified to provide educational services in the Lower Hudson Valley region of New York State. There are approximately 16,000 educators in the Lower Hudson

Valley region of New York State, with the majority employed in Westchester county (~ 11,700). Rockland county employs approximately 3,100 educators and Putnam county employs approximately 1,200 educators. A summary of the demographic characteristics of the participants is include in Table 1.

Table 1

Participant Demographic Characteristics by County

	Westchester $n = 235$		Rockland $n = 35$		Putnam $n = 46$		Other $n = 4$		Total $N = 320$	
Characteristic	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Primary Assignment										
Special Education	81	34.47	23	65.71	14	30.43	2	50.00	120	37.50
General Education	96	40.85	5	14.29	23	50.00	1	25.00	125	39.06
Integrated	47	20.00	6	17.14	7	15.22	1	25.00	61	19.06
Missing	11	4.68	1	2.86	2	4.35	-	-	14	4.38
Current Assignment Area										
General Education HS	30	12.77	1	2.86	8	17.39	-	-	39	12.19
Special Education HS	23	9.79	5	14.29	4	8.70	-	-	32	10.00
General Education MS	14	5.96	0	-	1	2.17	-	-	15	4.69
Special Education MS	10	4.26	1	2.86	3	6.52	-	-	14	4.38
General Education ES	22	9.36	0	-	11	23.91	-	-	33	10.31
Special Education ES	15	6.38	1	2.86	4	8.70	-	-	20	6.25
Administrator	26	11.06	5	14.29	10	21.74	2	50.00	43	13.44
Related Service	41	17.45	17	48.57	3	6.52	1	25.00	62	19.38
Career and Tech Ed	8	3.40	-	-	-	-	-	-	8	2.50
Teaching Assistant	5	2.13	-	-	-	-	1	25.00	6	1.89
Other	41	17.45	5	14.29	2	4.35	-	-	48	15.00
Education Experience										
1 to 5 years	17	17.34	3	8.57	5	10.87	1	25.00	25	7.81
6 to 10 years	26	11.06	4	11.42	7	15.22	1	25.00	37	11.56
11 to 15 years	44	18.72	8	22.86	10	21.74	-	-	62	19.38
16 to 20 years	52	22.12	6	17.14	9	19.57	-	-	67	20.94
21 or more years	96	40.85	14	40.00	15	32.61	2	50.00	125	39.06
Type of Education Setting										
Public	209	88.94	30	85.71	40	86.86	3	75.00	282	88.13
Private	2	0.85	1	2.86	2	4.35	-	-	5	1.56
Approved Placement	24	10.21	4	11.43	4	8.70	-	-	32	10.00
Missing	-	-	-	-	-	-	1	25.00	1	0.31
Community Setting										
Rural	5	2.13	3	8.57	8	17.39	-	-	16	5.00
Suburban	206	87.66	32	91.43	37	80.43	2	50.00	277	86.57
Urban	24	10.21	-	-	1	2.17	2	50.00	27	8.44

Instrumentation

Educators' perceptions of self-determination and amount of instruction of the components of self-determination were gathered through an adapted version of the survey instrument, Promoting Self-Determination and Student-Directed Learning: Expanded Version (Cho, 2005). This survey is an adapted version of a national survey developed by Wehmeyer, et al. (2000). Wehmeyer et al. (2000) based the national survey on the original version created and

used by Agran, Snow, and Swaner (1999). This current version of the survey was adapted by Cho (2013) to include information on grade taught, primary location for teaching assignment, number of years teaching, and seven instructional domains of self-determination. The researcher adapted the Cho (2013) survey to included open-ended qualitative questions to gather additional information on educators' perspectives of self-determination. A copy of the survey is included in Appendix C and permission to use the survey is included in Appendix D. The intended audience was elementary level educators; however, it is appropriate for use with educators at any level of the PreK-12 educational system (Cho, 2013).

Section 1: **Demographic Information**

There are three sections to the survey. The first section includes demographic information on teaching location, grade currently taught, type of school, number of years teaching, setting, and instructional strategies.

Section 2: Educators' Perspectives of Self-Determination

The second section of the survey includes five open-ended questions about the educators' perspectives of self-determination. These questions include the following:

1. In your own words, define self-determination as it refers to an individual's life.
2. Please identify the three most important components of self-determination.
3. In your opinion, is self-determination important? Why or why not?
4. In your opinion, do schools and educators support self-determination for students? Why or why not?
5. In your opinion, what do schools/educators need to provide instruction in self-determination skills?

These five questions were used to gather additional, detailed information about educators' perspectives of self-determination to lead to a deeper understanding of the educators' construct.

Section 3: Instructional Components

The third section of the survey has been validated to measure the educators' ratings of importance and self-reported amount of instruction of the components of self-determination. This section includes semantic differential scale ratings using a 6-point response format indicating the rating of importance of each component or the amount of instruction of each component of self-determination. The ratings of importance included (1) lowest (2) lower (3) low/medium (4) high/medium (5) higher, and (6) highest. The ratings of instruction included (1) never, (2) rarely, (3) sometimes, (4) occasionally, (5) often, and (6) very often. This section also includes the reasons instruction may not be provided in an area and an open-ended question on what types of self-determination may be included in an IEP document.

Reliability of Instrument

Two values were reported on this version of the survey regarding the internal consistency of the two scales: The Importance of Teaching Components of Self-Determination and the Frequency of Teaching Components of Self-Determination. The Importance of Teaching scale consists of seven items: (a) choice-making, (b) decision-making, (c) problem-solving, (d) goal setting, (e) self-advocacy/leadership, (f) self-management, (g) and self-awareness. These components showed high reliability with a reported Cronbach Alpha of .90 (Cho, 2013). The Frequency of Teaching Scale consists of seven items: (a) choice-making, (b) decision-making, (c) problem-solving, (d) goal setting, (e) self-advocacy/leadership, (f) self-management, (g) and self-awareness. These components showed high overall reliability with a reported Cronbach's Alpha of .83 (Cho, 2013).

While validity reports have not been published for the instrument, content validity is indicated since the items were based on functional definitions of the components of self-determination and anchored in the operationalized constructs of self-determination as proposed by Wehmeyer (1999). The functional model of self-determination has been empirically validated (Shogren et al., 2008; Wehmeyer, et al., 1996) and operationalized through the development of the ARC self-determination assessment (Wehmeyer, 1995). Face validity is apparent as each item is clearly defined on the instrument and directly corresponds with a component of self-determination as defined by theoretical constructs.

A copy of the survey is included in its entirety in Appendix C. Adaptations included additional demographic choices and qualitative response prompts. Demographic questions were expanded to include additional teacher certification titles and grade levels taught. Additionally, the classification titles for special education included in the survey were updated to include the current language reflected in the Individuals with Disabilities Education Act (2004, as cited in OSEP, 2017). Formatting has been adjusted for readability and ease of distribution. A pilot study confirmed face validity and readability of the adapted version of the survey. A small group of educators ($n = 4$) from a district in the Lower Hudson Valley of New York volunteered to complete a paper-based version of the survey. The participants were asked to provide notes on any questions that were unclear or confusing. These reflections were used to edit questions as necessary and ensure clarity. Neither of the rating scales were edited to maintain the reliability of the scales. Additional review of the survey was provided by professors of the doctoral program in educational leadership at Western Connecticut State University.

Data Collection Schedule

Upon the Institutional Review Board's (IRB) approval, the researcher contacted school superintendents in the Lower Hudson Valley of New York for permission to distribute the survey to educators in the respective districts. Although the initial invitation letter to the superintendents requested access to the distribution lists of educators in the district, all superintendents chose to forward the invitation to prospective participants rather than provide the researcher with access to the district contact list of educators. For this reason, the researcher was unable to provide additional reminder e-mails to the participants for the survey during Wave 1. These superintendents or their designated representatives identified the appropriate date and time for distribution to the educators. The first wave of survey distribution took longer than initially expected. Initial responses were limited. As a result, the researcher dedicated additional time to support supplementary reminders and contacts to the district superintendents and heads of school. The data collection schedule was adjusted accordingly. The schedule for the research process and data collection is provided in Table 2.

Table 2

Data Collection Schedule

Date	Data Collection Step
October 2018	Dissertation Proposal Approved
November 2018	IRB Approval Received
January 2019- June 2019	Survey Distribution and Data Collection
July 2019- October 2019	Data Analysis

Research Questions and Hypotheses

As a result of the literature review, the research questions, and hypotheses located in Table 3 were developed to guide an investigation of perceptions about and amount of instruction of self-determination for students.

Table 3

Research Questions and Hypotheses

Research Question	Hypothesis
1. To what degree and in what manner do primary assignment (special education or general education), years of experience, and educators' ratings of importance of each component of self-determination (choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, and self-awareness and self-knowledge) predict educators' total mean self-reported amount of instruction of the components of self-determination?	Non-directional: There will be a significant relationship between the predictor variables (primary assignment, years of experience, or educators' ratings of importance of the components of self-determination) and the criterion variable of educators' self-reported amount of instruction for self-determination.
2. Is there a significant correlation between educators' self-reported amount of instruction of each component of self-determination, their rating of importance of each component of self-determination, and the sum of number of sources of their knowledge on self-determination (Undergraduate Training, Graduate Training, District In-Service Training, Training Conference or Workshop, Education Text, Professional Journal, Article, Colleagues, Other)?	Non-directional: There will be a significant correlation in educators' self-reported amount of instruction of self-determination, their rating of importance of self-determination skills, and the number of sources of their knowledge of self-determination.
3. Is there a significant difference between educators' total mean self-reported amount of instruction of the components of self-determination and their total mean rating of importance of the components of self-determination based on their current role	Non-directional: There will be a significant difference between educators' mean rating of importance placed on self-determination skills and the total mean self-reported amount of instruction of the components of self-

(General Education, Special Education, Related Service)?	determination based on their current role.
4. What are the perceptions of educators on the benefits of self-determination and strategies to achieve it?	

Description and Justification of the Analyses

This study included four research questions. Multiple analyses were used to answer the research questions. For the first research question, a multi-linear regression using a stepwise procedure was conducted to determine if the non-directional hypothesis was supported by the data. This type of analysis was appropriate to analyze the variance in the model of the nine predictor variables: (a) primary assignment (special education, 1; general education, 0), (b) years of experience (1-60 years), and (c-i) educators' ratings of importance of the components self-determination (choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge; 1: lowest, 2: lower, 3: low/medium, 4: high/medium, 5: higher, 6: highest.) on the criterion variable of educators' rating of the amount of instruction of each component of self-determination (1: never, 2: rarely, 3: sometimes, 4: occasionally, 5: often, 6: very often).

For the second research question, multiple bivariate correlations were calculated for the sum of number of sources of knowledge, the variables of ratings of importance of the components of self-determination, and the variables of amounts of instruction of the components of self-determination.

For the third research question, a MANOVA was used to analyze the data. This analysis was used to test differences between the independent variable of current role with three levels:

general education, special education, and related services on the measures of two dependent variables: educators' mean amount of instruction of the components of self-determination and educators' mean rating of the importance of the components of self-determination. The research question was used to determine if there was a difference between populations of educators who have one of three roles and the amounts of instruction and ratings of importance of the components of self-determination. For this reason, comparison of means through a MANOVA was the appropriate statistical analysis.

The quantitative results also included ratings of importance and amount of instruction for each of the components of self-determination, allowing for comparison between types of data, enriching the results of both.

Content analysis and frequency tables were used to analyze open-ended responses for the final research question, "What are the perceptions of educators on the benefits of self-determination and strategies to achieve it?" Responses were coded using the operationalized components and essential characteristics of self-determination as defined by Wehmeyer (1999). Additional emergent codes were used for data that was not adequately categorized by the components of self-determination. The analyses for each research question are provided in Table 4.

Table 4

Research Questions and Analyses

	Research Question	Analyses
1.	To what degree and in what manner do primary assignment (special education or general education), years of experience, and educators' ratings of importance of each component of self-determination (choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, and self-awareness and self-knowledge) predict educators' total mean self-reported amount of instruction of the components of self-determination?	Step-wise Multiple Regression
2.	Is there a significant correlation between educators' self-reported amount of instruction of each component of self-determination, their rating of importance of each component of self-determination, and the sum of number of sources of their knowledge on self-determination (Undergraduate Training, Graduate Training, District In-Service Training, Training Conference or Workshop, Education Text, Professional Journal, Article, Colleagues, Other)?	Table of Correlations
3.	Is there a significant difference between educators' total mean self-reported amount of instruction of the components of self-determination and their total mean rating of importance of the components of self-determination based on their current role (General Education, Special Education, Related Service)?	MANOVA
4.	What are the perceptions of educators on the benefits of self-determination and strategies to achieve it?	Qualitative, Thematic Coding and Exploratory Analysis

Quantitative Limitations

Possible limitations of this study were lack of randomization, inability to manipulate the independent variable, and differential selection. Lack of randomization and inability to manipulate the independent variable are two weaknesses of correlational research. The topic of the proposed study necessitated a correlational design, for Research Questions One and Two, as

it would be impossible and unethical to manipulate the independent variables of primary assignment, years of experience, or assignment of participants to groups. Although these limitations are substantial, they are unavoidable and inherent in survey research. Results should be interpreted with caution with these threats taken into consideration.

Differential selection is a high threat as the primary sampling procedure is focused on canvasing local superintendents. The target population was educators in the Lower Hudson Valley of New York State working full-time in a school. Some superintendents did not agree to participate in the study due to scheduling constraints, competing initiatives, and concerns about the rating of instructional components in their school district. Superintendents were offered an aggregated summary of the responses to encourage distribution. Information on anonymity and potential benefits of the research were also included to encourage participation. Additionally, the sampling procedure included distribution of the survey to local, online forums, and direct distribution lists. Distributing the survey directly to educators increased access to the population during the second wave of distribution.

Threats to Survey Research

Due to the nature of survey research, additional threats to validity should be considered. Ponto (2015) and Dillman, Smyth, & Christian (2014) outlined four sources of error in survey research: (a) coverage error, (b) sampling error, (c) measurement error, (d) and nonresponse error. This study was designed to address each of these sources of error. Each type of error as well as steps to address it are outlined in Table 5.

Table 5

Threats to Survey Research Considerations

Type of Threat to Survey Research	Steps to Address Threat
Coverage Error: A chance that some individuals in the population are not included in the sample.	Multimodal design was implemented to address this error. The survey was provided in both online and print formats to increase the probability of a representative sample. As exhibited in Table 1, the sample included participants from all three counties, a variety of different instructional roles, educational experience, school setting, and community setting.
Sampling Error: Individuals in the sample do not represent the characteristics of the population.	Ponto (2015) recommends three techniques to address this source of error: A clearly defined population: The population for this study was certified educators in the Lower Hudson valley region of New York state. Diverse recruitment strategies and large sample: The survey was widely distributed through multiple recruitment strategies including direct contact with permission from individual school administration, local and online education communities, and distribution lists that cover the tri-county region.
Measurement Error: Measurement error occurs when the survey instrument does not accurately reflect the topic of study (Ponto, 2015).	This source of error has been addressed through the identification of a reliable instrument, based on established theoretical constructs. Additional pilot studies ensured that the survey was user-friendly.
Nonresponse Error: Differences between responders and non-responders have a higher potentiality of validity threat with a low response rate (Dillman et al., 2014).	All efforts were made to encourage a robust response rate including providing an incentive, building trust and transparency with participants, reminders, and multimodal distribution.

Trustworthiness

The trustworthiness of this study included consideration of credibility, confirmability, dependability, and transferability (Guba, 1981). Considerations and steps to address trustworthiness are described in Table 6.

Table 6

Trustworthiness Considerations

Type of Trustworthiness	Steps to Address Trustworthiness
Credibility or Truth Value: How well do the research design, informants, and context support accurate findings? Is the description of the case accurate?	The researcher implemented established research methods for gathering educators' perspectives and levels of implementation of self-determination. A confirmability audit was conducted to establish the qualitative research process was within the norms of professional practice and ensure that the findings were substantiated from the data collected.
Neutrality or Confirmability: How believable are the results of the research?	The researcher confirmed neutrality by relying on established research methods and operationalized coding of self-determination when interpreting results. A thorough description of the logic and methods used in this study ensured transparency of choices.
Dependability or Consistency: How well do the research techniques or instruments provide reliable measures over time?	Survey questions were submitted to a pilot review committee to ensure that the questions were clear and written as accurately as possible to capture educator's opinions. Coding was logical and traceable to original participant words.
Applicability: (Krefting, 1991), Transferability or "fittingness" (Guba, 1981); What is the extent to which the findings of this study can be applied to the population?	The code book and descriptions of frequency codes provided the context necessary for future researchers to assess the transferability of any potential findings.

Researcher Biography

Stephanie Wozniak is a transition specialist with the Lower Hudson Regional Partnership Center, providing support and professional development to districts and community members in transition planning and special education. Her career in education began by studying Psychology and Anthropology at Vassar College in Poughkeepsie, New York. She participated in research on children's perception of romantic love as they develop and studied gender and sexuality studies at the Universiteit van Amsterdam. She further developed her knowledge in this area as an LGBTQIA+ (Lesbian, Gay, Bisexual, Transexual, Transgender, Queer, Questioning, and Intersex, Asexual) advocate and educator.

During her undergraduate studies and after, Stephanie began working at a private, residential and day treatment center. In these experiences, she found that she enjoyed helping students overcome emotional or behavioral hurdles. Stephanie then received a Master of Science in Counselor Education degree at Western Connecticut State University, leading to certification in school counseling and state licensure in counseling in New York and Connecticut.

As a vocational counselor, she worked with special education transition-age students through crisis counseling, career exploration and assessment, and transition planning. She collaboratively designed, orchestrated, and supervised numerous campus programs to prepare students for postsecondary pathways. To further her knowledge in this area, she completed a certificate program at Buffalo State University and became a certified work-based learning coordinator in New York State.

Stephanie is currently a doctoral candidate in the Instructional Leadership Program at Western Connecticut State University. She completed a certificate program in administration and her research interests include curriculum ideologies, the interaction of professional and

personality identities, school engagement, self-determination, and cultural expectations for youth.

Statement of Ethics

This study did not sample any vulnerable populations and there was minimal risk to the participants. Reflecting on one's own instructional practice could have been uncomfortable for some educators. Every precaution was taken to mitigate this risk, including explicitly describing that participation is voluntary and that one can withdraw at any point in the study. A copy of the consent form used in this study is included in Appendix E.

Equitable access to participation in the survey was a concern as this study did not utilize random sampling. Multiple modes of distribution were used to access educators in the Lower Hudson region of New York. Superintendents and heads of school were contacted directly to distribute the survey to the educators in their school district. Educators were also contacted directly, with permission, through local distribution lists. The survey was available for participation on local, online educator discussion boards. An initial concern was that some participants may not possess the computer literacy skills to complete the online survey or have computer access; however, there was an overwhelming preference by participants to utilize the online survey version. Paper-based response options were provided to the superintendents and participants upon request; however, no participants chose this option.

Maintaining anonymity was an additional ethical concern of this study. No personally identifying information was collected with survey responses. The researcher prevented IP addresses from being recorded in the survey results through utilizing the anonymous option in the collector settings of the online survey software. All data collected were stored in a password protected electronic database. Although a small incentive was provided for participation,

accessing this incentive was not connected to the survey. Information submitted to participate in the raffle was collected separately and maintained securely for confidentiality. Electronically collected responses were maintained on a secure server that is password protected and encrypted. Aggregated results were made available to respective school administrators, as requested. Data were only be available to the primary researcher's committee at Western Connecticut State University for the purpose of data verification, coding, and analysis.

CHAPTER FOUR: ANALYSIS OF DATA AND EXPLANATION OF FINDINGS

The purpose of this study was to understand the factors that influence educators' perspectives and instruction regarding the components of self-determination. Four research questions related to educators' perspectives and self-reported amounts of instruction of self-determination were addressed:

1. To what degree and in what manner do primary assignment (special education or general education), years of experience, and educators' ratings of importance of each component of self-determination (choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, and self-awareness and self-knowledge) predict educators' total mean self-reported amount of instruction of the components of self-determination?
2. Is there a significant correlation between educators' self-reported amount of instruction of each component of self-determination, their rating of importance of each component of self-determination, and the sum of number of sources of their knowledge on self-determination (Undergraduate Training, Graduate Training, District In-Service Training, Training Conference or Workshop, Education Text, Professional Journal, Article, Colleagues, Other)?
3. Is there a significant difference between educators' total mean self-reported amount of instruction of the components of self-determination and their total mean rating of importance of the components of self-determination based on their current role (General Education, Special Education, Related Service)?
4. What are the perceptions of educators on the definition, components, and benefits of self-determination, and strategies to achieve it?

The researcher tested the following quantitative non-directional hypotheses for Research Questions One, Two, and Three:

1. There will be a significant relationship between the predictor variables (primary assignment, years of experience, educators' total mean rating of importance of the components of self-determination) and the criterion variable of educators' total mean self-reported amount of instruction of self-determination.
2. There will be a significant correlation in educators' self-reported amount of instruction of the components of self-determination, their ratings of importance of the components self-determination, and the sum of number of sources of knowledge on self-determination.
3. There will be a significant difference between educators' total mean self-reported amount of instruction of the components of self-determination and their mean rating of importance of the components of self-determination based on their current role.

The researcher utilized content and exploratory analyses for Research Question 4:

4. What are the perceptions of educators on the definition, components, and benefits of self-determination, and strategies to achieve it?

This chapter presents the following sections: (a) description of the data, (b) data screening process, (c) quantitative data analysis and results for Research Question One, (d) quantitative data analysis and results for Research Question Two, (e) quantitative data analysis and results for Research Question Three, (f) qualitative and exploratory data analysis and results for Research Question Four, (g) comparison of quantitative and qualitative data, and (h) chapter summary.

Description of the Data

Quantitative and qualitative data were collected through an adapted version of the survey instrument, Promoting Self-Determination and Student-Directed Learning: Expanded Version (Cho, 2005). The quantitative data for Research Questions One, Two, and Three were collected through demographic questions and two semantic differential scales. Each scale included ratings in a 6-point response format indicating both the rating of importance and the self-reported amount of instruction for each of the components of self-determination (choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge). The ratings of importance included (a) lowest (b) lower (c) low/medium (d) high/medium (e) higher, and (f) highest. The ratings of instruction included (a) never, (b) rarely, (c) sometimes, (d) occasionally, (e) often, and (f) very often. Demographic information collected included participants' certification type, primary assignment, current assignment, years of experience, and sources of their knowledge on self-determination.

To identify each participant's current role, the current assignment categories (i.e., Administrator, Elementary General Education Teacher, Elementary Special Education Teacher, Middle General Education Teacher, Middle Special Education Teacher, High School General Education Teacher, High School Special Education Teacher, Career and Technical Education Teacher, Teaching Assistant or Aide, Physical or Occupational Therapist, Psychologist, Counselor, Social Worker, Other) were condensed into the three categories of General Education, Special Education, and Related Service. Each of the assignment titles were categorized in a role area based on the service that they provided to students, pursuant to the New York State Education Department regulations. "General Education" included all teacher

assignments that provided instruction as defined in the Commissioner of Education Regulations, Part 100 which defines requirements for elementary, middle and secondary school programs in New York State (NYSED, 2002a). Similarly, the role of "Special Education" included all teacher assignments that provided instruction as defined in the Commissioner of Education Regulations, Part 200 which defines the requirements for students with disabilities (NYSED, 2002b). Related services are supportive services to assist students. For the purpose of this study, related services included support services for all students, including students with disabilities and support services for all students such as school counseling (also known as guidance). Embedded excel formulas recategorized each participant's current assignment to the categories of current role for data analysis of Research Question Two. Table 7 provides a description of each current role and the corresponding current assignment areas.

Table 7

Individual Coding for Current Role by Current Assignment

General Education *n* = 114	Special Education *n = 79*	Related Services *n* = 62	Other *n = 65*
General Education Teacher, Elementary	Special Education Teacher, Elementary	Physical or Occupational Therapist	Teaching Assistant or Aide
General Education Teacher, Middle	Special Education Teacher, Middle	Psychologist	Career and Technical Education Teacher
General Education Teacher, High School	Special Education Teacher	Counselor	
ESL/ENL Teacher[a]	Special Education Teacher, High School	Social Worker	Administrator
Literacy/Reading Specialist	Transition Coordinator	AT Specialist[b]	Technical Assistance Provider
Physical Education Teacher	Lead Special Educator	Speech and Language Therapist	Work-Based Learning Coordinator
Spanish Teacher	Special Education School Improvement Specialist		Instructional Coach
Library Services	Special Education Chair		SLMS[c]
Art Teacher	Vision Teacher		Gifted Teacher
Substitute Teacher			
Mathematics Teacher			

Note. [a]English as a Second Language or English as a New Language Teacher. [b]Assistive Technology Specialist. [c]unknown

Administrators (*n* = 43), teaching assistants or aides (*n* = 7), work-based learning coordinators (*n* = 2), gifted teachers (*n* = 2), instructional coach (*n* = 1), and technical assistance provide (*n* = 1) were not included in this coding as these assignment areas could potentially serve in any of the three role areas. Additionally, although the researcher had planned to include career and technical education teachers (*n* = 8) as a role area, there were not enough responses to include

these individuals as a separate category. The current role of related service included physical or occupational therapist, psychologist, counselor, social worker, assistive technology specialist, and speech and language therapist. For all participants who identified their role as "other," the researcher reviewed the open-response area for each and coded each to a role as appropriate. Lastly, one respondent identified their current assignment as "SLMS." The researcher could not identify the assignment for this acronym, and it was, therefore, not included in any of the current role categories.

Additional recoding was necessary to prepare the data for analysis. In the survey, participants identified their primary assignment as general education, special education, or integrated. "Primary assignment" was a separate category from "current assignment" or "current role." As Research Question One focused on general education or special education, participants who responded as "integrated" were not included in this recoding. The variable of primary assignment was recoded from the three response categories of special education, general education, and integrated to the two codes of "0," general education and "1," special education, to render the categorical information into quantitative form for use in the multiple regression analysis (Cohen, Cohen, West, & Aiken, 2003). Additionally, embedded excel formulas in the quantitative data table calculated the mean ratings of importance and total mean self-reported amounts of instruction for all seven components of self-determination and the total number of sources of knowledge of self-determination identified for each participant.

For Research Question Four, participants were asked to respond to five open-ended questions:

1. In your own words, define self-determination as it refers to an individual's life.
2. Please identify the three most important components of self-determination.

3. In your opinion, is self-determination important? Why or why not?
4. In your opinion, do schools and educators support self-determination for students? Why or why not?
5. In your opinion, what do schools/educators need to provide instruction in self-determination skills?

Participants were also asked to identify reasons that might lead them not to provide instruction in the components of self-determination. The survey question asked, "What reasons might lead you to decide not to provide instruction in any of the previously listed self-determination skills?" A checklist of possible reasons was provided to the participants. Options in the checklist included the following items:

- Your students have adequate skills in these areas
- Your students have difficulty communicating effectively.
- Your students are too young to learn these skills.
- You find it difficult to empathize with your students
- You have difficulty collaborating with your colleagues or administrators.
- Someone else is responsible for instruction in this area.
- You don't have sufficient time to provide instruction in these areas.
- You don't have the latitude to provide instruction in these areas. (i.e., because of the course content requirements, state testing requirements, etc.)
- There are other areas in which your students need instruction more urgently (e.g academic areas, challenging behavior).
- Your students would not benefit from instruction in these areas because of their characteristics (i.e., their passivity, level of their ability or capacity to engage in behavior)
- You haven't had sufficient training or information on teaching in these areas.

Participants were also asked two questions relating to their perspectives on the helpfulness of self-determination in academics and post-school outcomes: "How much will teaching your students self-determination help them improve their academic performance and social behaviors in school?" and "How much will teaching self-determination prepare your students for future years in secondary education and/or transition to adult goals?" Participants

rated their responses on a five-point Likert scale, ranging from 1 (Not at all Helpful) to 5 (Very Helpful).

Description of Variables

Research Question One

For Research Question One, there were nine predictor variables: (a) primary assignment (special education, 1; general education, 0), (b) years of experience (1-60), and (c-i) educators' ratings of importance of components of self-determination (choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge; 1: lowest; 6: highest) and one criterion variable: educators' total mean self-reported amount of instruction of self-determination; 1: lowest; 6: highest).

Research Question Two

Research Question Two included simple correlations. Bivariate correlations were calculated for the total number of sources of knowledge and the variables of ratings of importance of the components of self-determination and the variable of amount of instruction of the components of self-determination.

Research Question Three

For Research Question Three, the independent variable was current role with three levels: general education, special education, and related service. There were two dependent variables for Research Question Three: educators' total mean self-reported amount of instruction and educators' total mean rating of importance of all the components of self-determination. Both dependent variables consist of interval data, measured on a 6-point Likert scale (1: lowest; 6: highest).

Research Question Four

For Research Question Four, content analysis was used to analyze open-ended responses. Responses were coded using the essential characteristics and operationalized components of self-determination as defined by Wehmeyer (1999). The quantitative results of the survey are also organized by these themes. Coding both sets of data with these labels allowed for comparison between data sources, enriching the results of both. Additional emergent codes were used for data that were not adequately categorized by the components of self-determination.

Data Screening Process

To prepare for data analysis, the raw data were screened. The data screening process included data coding and entry, data and value cleaning, visual inspection using the Statistical Package for Social Sciences (SPSS), and detection of outliers (Meyers, Gamst, & Guarino, 2006).

Data Coding and Entry

All participants were assigned a participant ID number through the online SurveyMonkey application when they accessed the survey. This ID number was maintained for each participant throughout all data cleaning and analysis procedures. All survey data were downloaded to a single spreadsheet. The researcher turned on the "anonymous" option of the online application and no personally identifying information was collected to maintain anonymity.

Quantitative data. A spreadsheet was created for demographic and quantitative data including the following categories: (a) respondent ID number, (b) electronic consent, (c) employment status as an educator, (d) county of employment, (e) certification title, (f) college or university attended for certification area, (g) current assignment, (h) current role, (i) years in current role, (j) years of experience in education, (k) grades currently working in, (l) school

setting, (m) district environment, (n) ratings of importance for each component of self-determination, (o) ratings of amounts of instruction for each component of self-determination, (p) strategies previously taught, (q) reasons participants do not provide instruction in self-determination, (r) familiarity with self-determination, (s) sources of knowledge of self-determination, (t) primary assignment area, (u) does the participant teach students with disabilities, (v) disabilities populations that the participants teach, (w) class setting, (x) rating scale of helpfulness of self-determination in academic outcomes, and (y) rating scale of helpfulness of self-determination in postsecondary outcomes. The following variables were not used in the analysis for this study: (a) college or university attended for certification area, (b) years of experience in current role, (c) grades currently working in, (d) school setting, (e) district environment (f) strategies previously taught (g) does the participant teach students with disabilities, and (h) disabilities populations that the participants teach, and (i) class setting. Individual variables were coded for analysis. All codes were recorded in a codebook. Tables 8 through Table 10 provide a description of the variables' names, their codes, the type of SPSS field, and their values.

Table 8

SPSS Codebook of Demographic Variables

Label	Code Name	SPSS Field	Assigned Values
County	County	Numeric	1 = Westchester 2 = Rockland 3 = Putnam 4 = Other
Current Assignment	CurrentAssig	Numeric	1 = Administrator 2 = General Education Teacher, Elementary 3 = Special Education Teacher, Elementary 4 = General Education Teacher, Middle 5 = Special Education Teacher, Middle 6 = General Education Teacher, High School 7 = Special Education Teacher, High School 8 = Career and Technical Education Teacher 9 = Teaching Assistant or Aide 10 = Physical or Occupational Therapist 11 = Psychologist 12 = Counselor 13 = Social Worker 14 = Other (please specify)
Current Role	CurRole	Numeric	1 = General Education 2 = Special Education 3 = Related Service

(Continued)

Table 8

SPSS Codebook of Demographic Variables

Label	Code Name	SPSS Field	Assigned Values
Years of Experience in Education	YrsExpEduc	Numeric	Exact 1-52
Years in Current Role	YrsCurRole	Numeric	Exact 1-40
School Setting	SchoolSetting	Numeric	1 = Public 2 = Private 3 = Approved Placement
District Environment	DistEnviron	Numeric	1 = Suburban 2 = Urban 3 = Rural
Primary Assignment Area	PrimAssignmentD	Numeric	0 = General Education 1 = Special Education
Teach Students with Disabilities	TeachStudwDis	Numeric	1 = Yes 0 = No
Classroom Setting	ClassSet	Numeric	1 = Regular Class 2 = Resource Room 3 = Self-Contained
Teach Students with Specific Learning Disabilities	SLD	Numeric	1 = Yes 0 = No
Teach Students with Speech or Language Disabilities	SPLD	Numeric	1 = Yes 0 = No

Table 9

SPSS Codebook of Self-Determination Variables

Label	Code Name	SPSS Field	Assigned Values
Are you Familiar with the term "self-determination"?	FamSelfD	Numeric	1 = Yes 2 = No
Source of Knowledge of Self-Determination: Graduate Training	SourceKnowGrad	Numeric	1 = Graduate Training 0 = No Graduate Training
Source of Knowledge of Self-Determination: District In-Service Training or Workshop	SourceKnowInSer	Numeric	1 = District In-Service Training or Workshop 0 = No District In-Service Training or Workshop
Source of Knowledge of Self-Determination: Training Workshop or Conference	SourceKnowCon	Numeric	1 = Training Workshop or Conference 0 = No Training Workshop or Conference
Source of Knowledge of Self-Determination: Education Text	SourceKnowText	Numeric	1 = Education Text 0 = No Education Text
Source of Knowledge of Self-Determination: Professional Journal	SourceKnowJour	Numeric	1 = Professional Journal 0 = No Professional Journal
Source of Knowledge of Self-Determination: Article	SourceKnowArt	Numeric	1 = Article 0 = No Article

(Continued)

Table 9

SPSS Codebook of Self-Determination Variables

Label	Code Name	SPSS Field	Assigned Values
Source of Knowledge of Self-Determination: Colleagues	SourceKnowCol	Numeric	1 = Colleagues 0 = No Colleagues
Source of Knowledge of Self-Determination: Other	SourceKnowOth	Numeric	1 = Real Life 1 = RSE-TASC 1 = Past Career 1 = News 1 = Fitness/Sports 1 = Grammar School 1 = General Education 1 = Other Training 1 = Other Literature 1 = Parents/Family 1 = Internet
Source of Knowledge of Self-Determination: Source Unidentified	SourceKnowUnID	Numeric	1 = Source Unidentified 0 = Source Identified
Number of Sources of Knowledge	NumSources	Numeric	Exact 0-8

Table 10

SPSS Codebook of Rating Scales

Label	Code Name	SPSS Field	Possible Values
Amount of Instruction in Choice-making	CMIns	Numeric	1: Never 2: Rarely 3: Sometimes 4: Occasionally 5: Often 6: Very Often
Amount of Importance of Choice-making	CMImp	Numeric	1: Lowest 2: Lower 3: Low/Medium 4: High/Medium 5: Higher 6: Highest
Amount of Instruction in Decision-Making	DMIns	Numeric	1: Never 2: Rarely 3: Sometimes 4: Occasionally 5: Often 6: Very Often
Amount of Importance of Decision-Making	DMImp	Numeric	1: Lowest 2: Lower 3: Low/Medium 4: High/Medium 5: Higher 6: Highest
Amount of Instruction in Problem-Solving	PSIns	Numeric	1: Never 2: Rarely 3: Sometimes 4: Occasionally 5: Often 6: Very Often

(Continued)

Table 10

SPSS Codebook of Rating Scales

Label	Code Name	SPSS Field	Possible Values
Rating of Importance of Problem-Solving	PSImp	Numeric	1: Lowest 2: Lower 3: Low/Medium 4: High/Medium 5: Higher 6: Highest
Amount of Instruction in Goal-Setting and Attainment	GSAIns	Numeric	1: Never 2: Rarely 3: Sometimes 4: Occasionally 5: Often 6: Very Often
Rating of Importance of Goal-Setting and Attainment	GSAImp	Numeric	1: Lowest 2: Lower 3: Low/Medium 4: High/Medium 5: Higher 6: Highest
Amount of Instruction in Self-Advocacy and Leadership	SAIns	Numeric	1: Never 2: Rarely 3: Sometimes 4: Occasionally 5: Often 6: Very Often
Rating of Importance of Self-Advocacy and Leadership	SAImp	Numeric	1: Lowest 2: Lower 3: Low/Medium 4: High/Medium 5: Higher 6: Highest

(Continued)

Table 10

SPSS Codebook of Rating Scales

Label	Code Name	SPSS Field	Possible Values
Amount of Instruction in Self-Management and Self-Regulation	SMSRIns	Numeric	1: Never 2: Rarely 3: Sometimes 4: Occasionally 5: Often 6: Very Often
Rating of Importance of Self-Management and Self-Regulation	SMSRImp	Numeric	1: Lowest 2: Lower 3: Low/Medium 4: High/Medium 5: Higher 6: Highest
Amount of Instruction in Self-Awareness and Self-Knowledge	SASKIns	Numeric	1: Never 2: Rarely 3: Sometimes 4: Occasionally 5: Often 6: Very Often
Rating of Importance of Self-Awareness and Self-Knowledge	SASKImp	Numeric	1: Lowest 2: Lower 3: Low/Medium 4: High/Medium 5: Higher 6: Highest
Mean Rating of Importance	AVGImp	Numeric	1: Lowest 2: Lower 3: Low/Medium 4: High/Medium 5: Higher 6: Highest

(Continued)

Table 10

SPSS Codebook of Rating Scales

Label	Code Name	SPSS Field	Possible Values
Mean Amount of Instruction	AVGIns	Numeric	1: Never 2: Rarely 3: Sometimes 4: Occasionally 5: Often 6: Very Often
Rating of helpfulness of Self-Determination on Students' Academic Performance	HelpSelfDAcad	Numeric	1 = Not at all helpful 2 = Somewhat helpful 3 = Helpful 4 = Very Helpful 5 = Extremely Helpful
Rating of helpfulness of Self-Determination on Students' Post Secondary Success	HelpSelfDPostS	Numeric	1 = Not at all helpful 2 = Somewhat helpful 3 = Helpful 4 = Very Helpful 5 = Extremely Helpful

Qualitative data. A second spreadsheet was created with columns that represented: (a) participant ID number, (b) participants' current role, (c) definition of self-determination, (d) identification of the three most important components of self-determination, (e) importance of self-determination, (f) educator support of self-determination, (g) educators' needs to support self-determination, and (h) occurrence of self-determination on IEPs, (i) rating of helpfulness of self-determination on students' academic performance, and (j) rating of helpfulness of self-determination on students' postsecondary success. The data were then used to identify frequencies of the identification of components and theoretical constructs of self-determination.

Additional emergent themes and patterns were identified from the participants' responses. Appendix F and G provides a detailed reference of the codes used in this coding.

Data and Value Cleaning

The researcher reviewed the data and removed non-response cases and respondents who did not meet the requirements of the defined sample. A total of 504 respondents accessed the survey link. Six cases were removed because the respondent answered "no" to "Are you currently employed as an educator in an educational setting?" One hundred seventy-six respondents were removed because they stopped responding after the question, "Are you currently employed as an educator in an educational setting?" A total of 320 completed responses remained for quantitative and qualitative analyses. Four respondents were regional educators who did not work in a single county or provide a specific school role or primary assignment. They were not included in the quantitative data analysis. At the conclusion of this stage of data cleaning, 316 cases were included in the excel data sheet for quantitative analysis.

Missing values. The researcher reviewed the data sheet for missing values. The design of the online survey required a response for each question to move on to the next question. The consent page at the beginning of the survey informed the participants that they could "stop at any time without completing the survey" without any consequences. For this reason, all missing values were a result of participants ceasing responses prior to survey completion. This could have resulted from response fatigue or time constraints. Visual analysis revealed that 10 participants stopped answering survey questions after the demographic responses, resulting in missing values for the rating scales, source of knowledge of self-determination, perspectives on self-determination, and primary assignment area. An additional four participants stopped answering the survey after the rating scales, resulting in missing values for their source of

knowledge of self-determination, perspectives of self-determination, and primary assignment areas. As these cases did not provide adequate information on the variables necessary for data analysis, the researcher chose to exclude these cases listwise.

Excluding cases listwise removes cases with missing values from all analyses (Pallant, 2016). Although this technique can reduce the sample size, the identified cases only represented four percent of the sample for this study and the identified cases did not systematically differ from the complete cases. Listwise deletion provides valid inferences when data are missing at random (Allison, 2001). Prior to excluding the cases, the researcher conducted a visual analysis to ensure that removal would not disproportionately affect the representation in any of the dependent variables. The cases with missing values were evenly distributed across the levels in the dependent variables. Cases 10762505216, 10735669623, 10718673175, 10659975842, 10654384624, 10654090918, 10577215047, 10718483221, 10491844989, 10545450202, 10763108320, 10762507184, 10484365531, and 10452748225 were excluded from all quantitative data analysis. Three hundred two cases remained after the exclusion of cases with missing values listwise.

Detection of Outliers

Outliers can have a dramatic effect on correlation coefficients (Pallant, 2016). The researcher analyzed the data to inspect for univariate and multivariate outliers.

Univariate outliers of rating scale variables. To detect univariate outliers, the researcher visually inspected the box plots for each of the dependent variables (educators' self-reported amounts of instruction and educators' ratings of importance of the components of self-determination). These boxplots are exhibited in Figures 1 and 2.

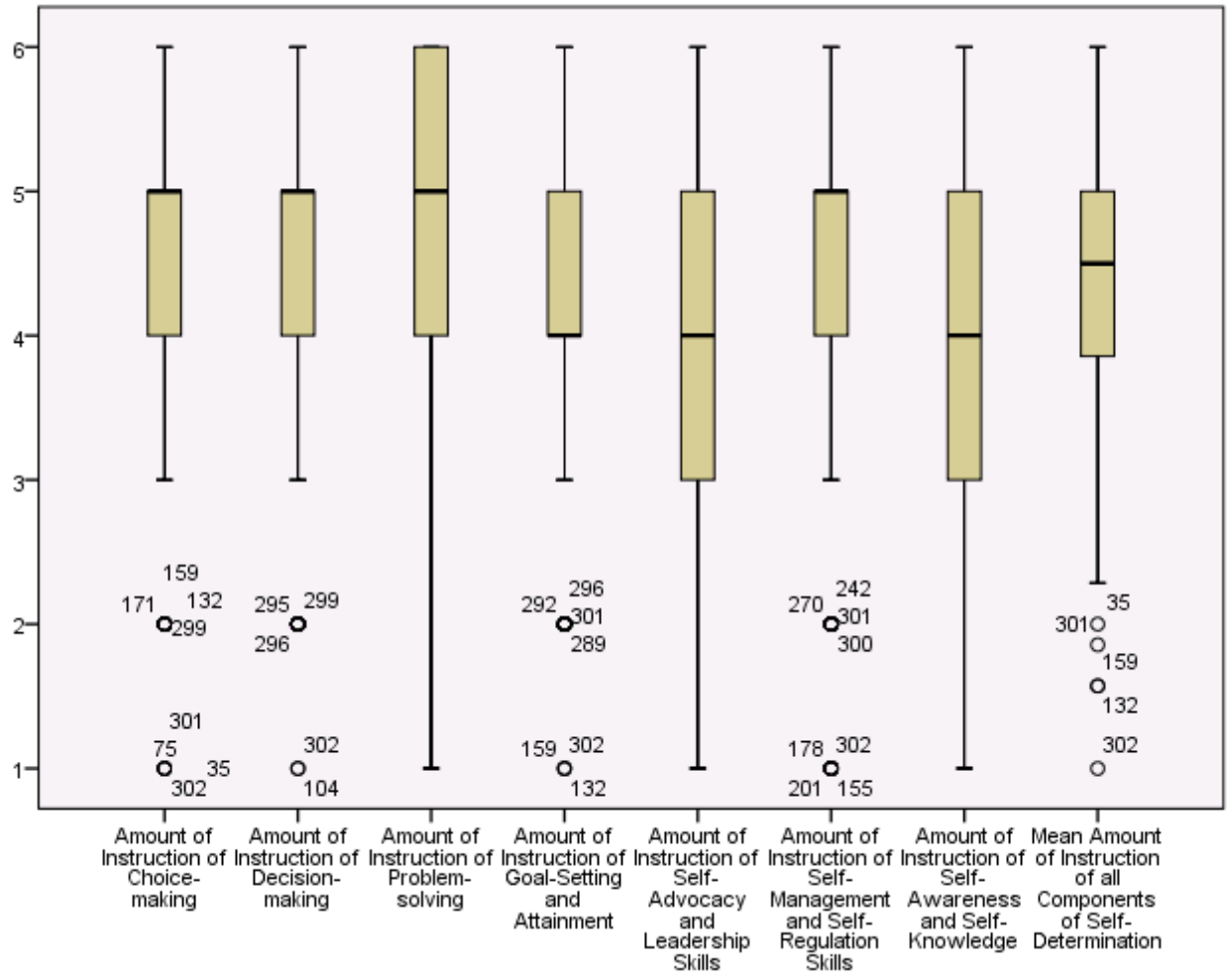

Figure 1. Boxplots of Amounts of Instruction of the Components of Self-Determination

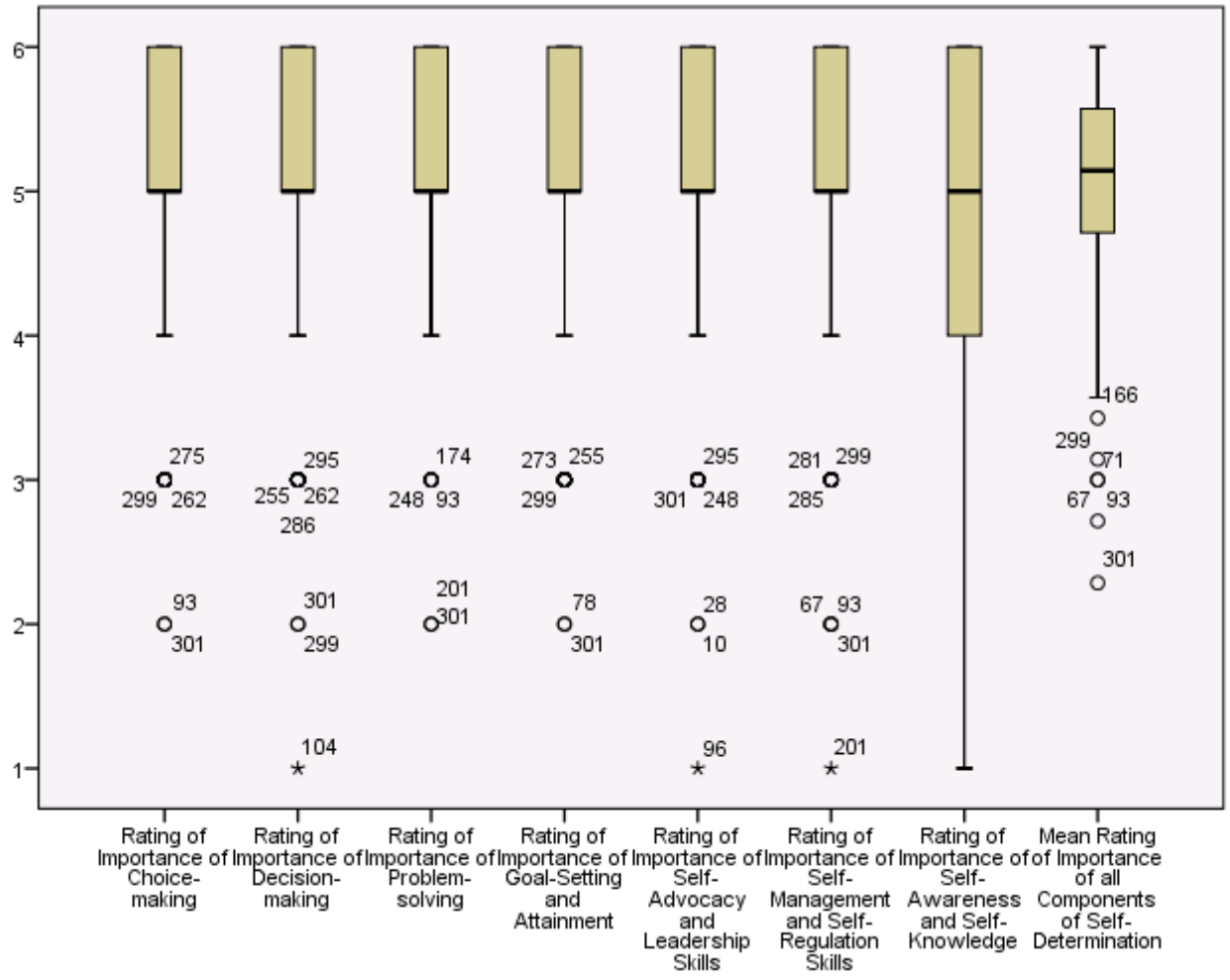

Figure 2. Boxplots of Ratings of Importance of the Components of Self-Determination

In each boxplot, SPSS identifies potential outliers as data points located outside the fences of each boxplot, calculated as outside 1.5 times the interquartile range above the upper quartile and below the lower quartile. Tabachnick and Fidell (2007) define univariate outliers as data points that are more than three standard deviations away from the mean (standardized score > 3.29). The researcher calculated the standard scores (*z*-scores) of all values identified as potential outliers in the SPSS boxplots. These scores are exhibited in Table 11.

Table 11

Standard Scores of SPSS Identified Outliers for Rating Scales

Participant ID (SPSS ID)	*M*	Raw Value	Standard Deviation	Z-Score $Z = (x-\mu)/\sigma$	Outliers *n*	Outliers % of Sample
Ratings of Importance						
Choice-making	5.02		0.833		1	0.33
10455274091 (262)		3		-2.43		
10721064783 (93)		2		-3.63*		
10454548945 (275)		3		-2.43		
10452363323 (301)		2		-3.63*		
10452462909 (295)		3		-2.43		
Decision-Making	5.07		0.887		3	0.99
10719328677 (104)		1		-4.59*		
10452358302 (299)		2		-3.46*		
10452363323 (301)		2		-3.46*		
10457020174 (255)		3		-2.33		
10455274091 (262)		3		-2.33		
10453900005 (286)		3		-2.33		
Problem-Solving	5.30		0.786		2	0.66
10721064783 (93)		3		-2.93		
10602975994 (201)		2		-4.20*		
10654346852 (174)		3		-2.93		
10484301739 (231)		3		-2.93		
10452363323 (301)		2		-4.20*		
Goal-Setting and Attainment	5.04		0.918		2	0.66
10728366783 (78)		2		-3.31*		
10452363323 (301)		2		-3.31*		
10457020174 (255)		3		-2.22		
10454570966 (273)		3		-2.22		
10453511661 (289)		3		-2.22		

Note. Identified Outliers = standardized score > 3.29 (Tabachnick & Fidell, 2007)

(Continued)

Table 11

Standard Scores of SPSS Identified Outliers for Rating Scales

Participant ID (SPSS ID)	*M*	Raw Value	Standard Deviation	Z-Score $Z = (x-\mu)/\sigma$	Outliers *n*	Outliers % of Sample
Ratings of Importance						
Self-Advocacy and Leadership	5.02		.934		1	0.33
10802666973 (10)		2		-3.24		
10763467600 (28)		2		-3.24		
10721029132 (96)		1		-4.31*		
10461157834 (248)		3		-2.17		
10452462909 (295)		3		-2.17		
10452358302 (299)		3		-2.17		
Self-Management and Self-Regulation	5.14		.923		4	1.32
10729602455 (67)		2		-3.40*		
10602975994 (201)		1		-4.49*		
10454475683 (281)		3		-2.32		
10453904754 (285)		3		-2.32		
10452358302 (299)		3		-2.32		
10721064783 (93)		2		-3.40*		
10452363323 (301)		2		-3.40*		
Self-Awareness and Self-Knowledge	4.91		.963		0	
Mean Rating of all Components	5.07		.674		2	0.66
10729602455 (67)		3		-3.08		
10728824461 (71)		3		-3.08		
10656956911 (166)		3.43		-2.44		
10452363323 (301)		2.29		-4.14*		
10452358302 (299)		3.14		-2.86		
10721064783 (93)		2.71		-3.50*		

Note. Identified Outliers = standardized score > 3.29 (Tabachnick & Fidell, 2007)

(Continued)

Table 11

Standard Scores of SPSS Identified Outliers for Rating Scales

Participant ID (SPSS ID)	*M*	Raw Value	Standard Deviation	Z-Score $Z = (x-\mu)/\sigma$	Outliers *n*	Outliers % of Sample
Self-Reported Amounts of Instruction						
Choice-Making	5.06		1.106		0	
10762473005 (35)		1		-3.07		
10728735832 (75)		1		-3.07		
10452363323 (301)		1		-3.07		
10718476167 (132)		2		-2.17		
10736525089 (302)		1		-3.07		
10694666371 (159)		2		-2.17		
10654745141 (171)		2		-2.17		
Decision-Making	4.44		1.103		0	
10719328677 (104)		1		-3.11		
10736525089 (302)		1		-3.11		
10452462909 (295)		2		-2.21		
10452414062 (296)		2		-2.21		
10452358302 (299)		2		-2.21		
Problem-Solving	4.72		1.009		0	
Goal-Setting and Attainment	4.32		1.198		0	
10718476167 (132)		1		-2.77		
10736525089 (302)		1		-2.77		
10452774649 (292)		2		-1.94		
10453511661 (289)		2		-1.94		
10452414062 (296)		2		-1.94		
10452363323 (301)		2		-1.94		
Self-Advocacy and Leadership	4.24		1.25		0	

Note. Identified Outliers = standardized score > 3.29 (Tabachnick &Fidell, 2007)

(Continued)

Table 11

Standard Scores of SPSS Identified Outliers for Rating Scales

Participant ID (SPSS ID)	*M*	Raw Value	Standard Deviation	Z-Score $Z = (x-\mu)/\sigma$	Outliers *n*	Outliers % of Sample
Self-Reported Amounts of Instruction						
Self-Management and Self-Regulation	4.42		1.252		0	
10713340679 (155)		1		-2.73		
10654229441 (178)		1		-2.73		
10602975994 (201)		1		-2.73		
10468094711 (242)		2		-1.93		
10454673812 (270)		2		-1.93		
10452283239 (300)		2		-1.93		
Self-Awareness and Self-Knowledge	4.16		1.247		0	
Mean Self-Reported Amounts of Instruction	4.38		.891		1	0.33
10762473005 (35)		2		-2.68		
10736525089 (302)		1		-3.80*		
10718476167 (132)		1.57		-3.16		
10694666371 (159)		1.57		-3.16		
10452363323 (301)		1.86		-2.83		

Note. Identified Outliers = standardized score > 3.29 (Tabachnick & Fidell, 2007)

As defined by Tabachnick and Fidell (2007), there were 17 outliers in variables of instruction and importance of the components of self-determination (standardized score > 3.29). Each of the cases containing outliers were inspected for errors. No errors were evident upon inspection in each of these cases. Upon visual analysis, the researcher noted that almost all outliers (16/17) occurred in variables of ratings of importance that were lower than the rest of the sample. The researcher also visually analyzed these outliers for any systematic demographic

characteristics and found they were evenly distributed across counties, groups of primary assignment, sources of knowledge of self-determination, current role, and years of experience in education.

Osborne and Overbay (2004) state that with larger sample sizes, it is possible that outliers occur legitimately by chance. Specifically, there is about a 1% chance of an outlier from a normally distributed population (Osborne & Overbay, 2004). Cohen et al. (2003) suggested that if outliers are less than one or two percent of the sample and not very extreme, "they are probably best left alone" (p. 128). As removal of these outliers could disproportionately effect ratings of importance and represent less than two percent of the sample size, the researcher chose to include the outliers, while conducting additional testing for outliers prior to the individual analysis for each research question.

Univariate outliers of educators' years of experience. The researcher inspected the variable of educators' years of experience. Visual inspection of a scatterplot produced in SPSS, revealed two possible outliers. The boxplot is exhibited in Figure 3.

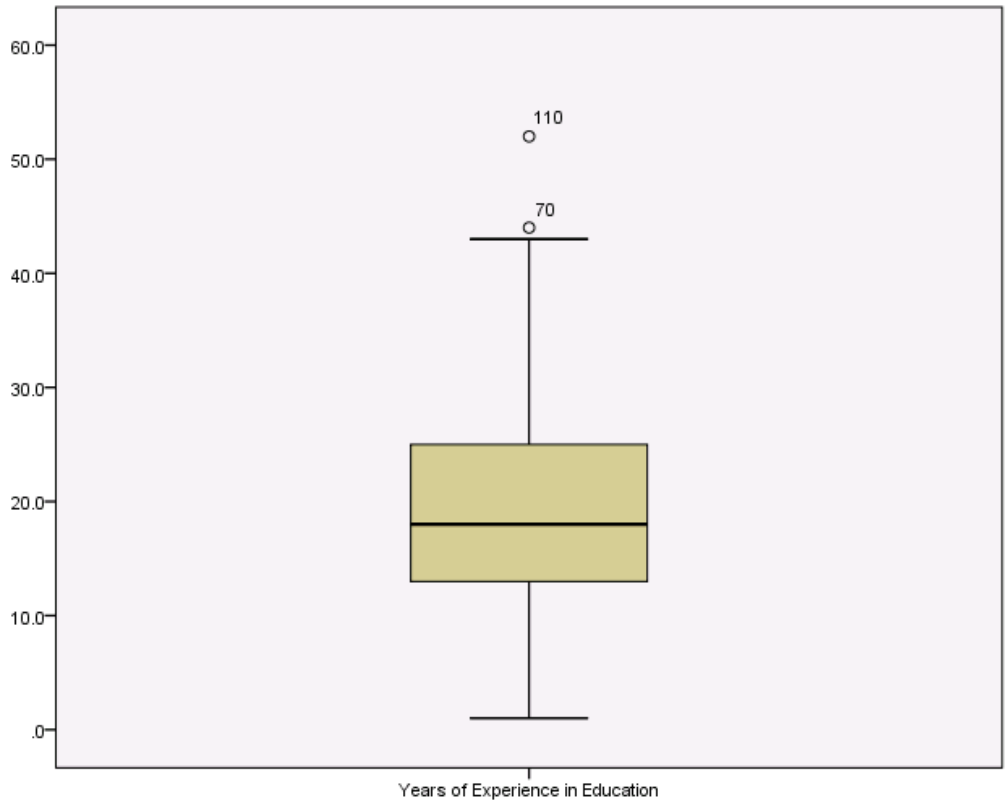

Figure 3. Boxplot of Educators' Years of Experience in Education

The two cases identified as possible outliers in SPSS were further analyzed through visual inspection and identification of standardized scores. This analysis is exhibited in Table 12. One data point met the criteria definition of outlier as defined by Tabachnick and Fidell (2007; standardized score > 3.29). As the outliers represented less than one percent of the sample (Cohen et al., 2003), they were not considered for deletion.

Table 12

Standard Scores of SPSS Identified Outliers for Years of Experience

Participant ID (SPSS ID)	Value	Standard Deviation	Z-Score $Z = (x\text{-}\mu)/\sigma$	Outliers	
				n	% of Sample
10728842961 (70)	44	9.709	2.54	1	.33
10718983536 (110)	52		3.37*		

Note. Identified Outliers = standardized score > 3.29 (Tabachnick & Fidell, 2007)

Univariate outliers of dichotomous variables. The researcher analyzed the dichotomous variable of primary assignment area (special education or general education) for extreme splits. Any variables with extreme splits (e.g., 90%-10%) should be deleted (Tabachnick & Fidell, 2001). As exhibited in Figure 4, the primary assignment area was relatively evenly distributed, and therefore, was not considered for deletion.

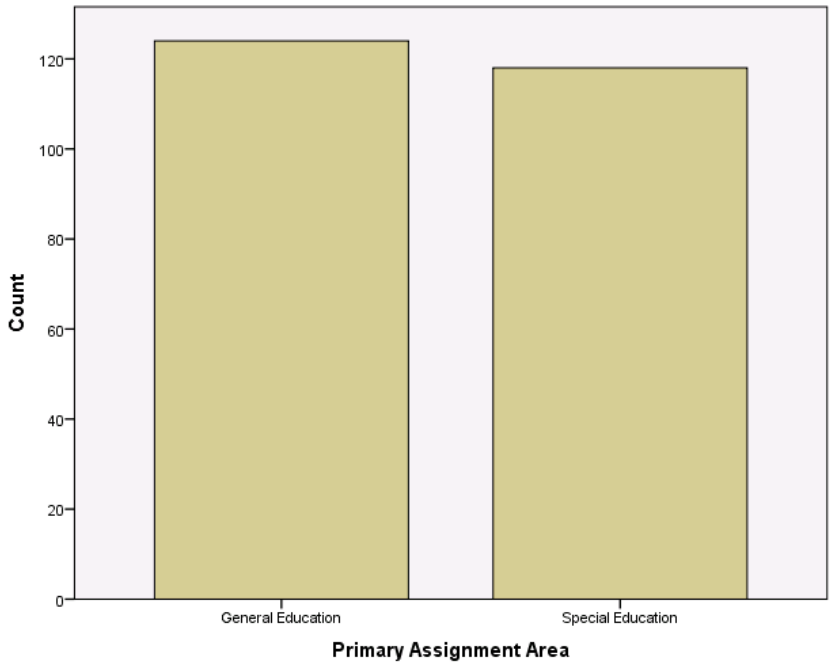

Figure 4. Bar Graph of Frequencies of Primary Assignment

Multivariate outliers. In addition to testing for univariate outliers, the researcher also inspected the data for multivariate outliers or cases with an extreme value on a combination of variables (Tabachnick & Fidell, 2007). Meyers et al. (2006) recommend conducting bivariate scatterplots for combinations of key variables. The scatterplots were visually inspected, and a Mahalanobis Distance procedure was conducted to analyze for multivariate outliers.

First, the key variables of primary assignment (special education or general education), years of experience, and educators' mean rating of importance of self-determination were analyzed. The variable of primary assignment with only two levels (special education or general

education) was not included in the scatterplot as it created a visual split in the data. A scatterplot of mean rating of importance and years of experience is exhibited in Figure 5.

Figure 5. Scatterplot of Years of Experience and Mean Rating of Importance

In Figure 5, each point on the scatterplot represents a single case for the values of mean rating of importance and years of experience. Although most cases are clustered, the scatterplot shows a spread of possible outliers. Further analysis was needed to identify multivariate outliers in this group of key variables. Additionally, including primary assignment in the analysis was necessary to thoroughly test for multivariate outliers. The researcher conducted the Mahalanobis distance (D^2) for each case.

The Mahalanobis Distance is the distance of each case from the centroid, the means of all the variables (Tabachnick & Fidell, 2013). Any case that has a strange pattern across the three variables of primary assignment (special education or general education), years of experience,

and educators' mean rating of importance of self-determination was identified using this method. Using SPSS, the researcher calculated the Mahalanobis Distance (n = 242) for these three variables. Notably, the sample of respondents whose primary assignment areas were general or special education was smaller than the total number of respondents (n = 302) as participants who identified their primary assignment as "integrated" were not included in the analysis. The distance of each case was compared to the chi-square criterion, $\chi^2(3, n = 242) = 16.267$, using the compute function of SPSS to identify the significance value of the right-tail of the chi-square distribution. Table 13 summarizes the Mahalanobis Distance and significance value of each of the extreme cases identified by SPSS.

Table 13

Extreme Values for the Mahalanobis Distance of Primary Assignment, Years of Experience, and Mean Rating of Importance

Rank	Case Number	Mahalanobis Distance	Significance Level
Highest			
1	10452363323	18.71186	.0003*
2	10721064783	11.96489	.0075
3	10729602455	9.67858	.0215
4	10461157834	9.21866	.0265
5	10545641095	8.30023	.0402
Lowest			
1	10763086033	0.95845	.81130
2	10762660119	1.01083	.79863
3	10654229441	1.01831	.79682
4	10762580245	1.03055	.79386
5	10452414062	1.04930	.78932

Note. $p < .001$ (Meyers, et al., 2006)

Using the significance level of $p < .001$ (Meyers et al., 2006), one case, 10452363323, was identified as an extreme multivariate outlier. This case was excluded from further analyses.

The researcher also calculated a separate Mahalanobis Distance ($n = 301$) for the variables of educators' total mean self-reported amount of instruction for the components of self-determination, their mean rating of importance for the components of self-determination, and the number of identified sources of knowledge on self-determination. The distance of each case was compared to the chi-square criterion, $\chi^2(3, n = 301) = 16.267$, using the compute function of SPSS to identify the significance value of the right-tail of the chi-square distribution. Table 14 summarizes the Mahalanobis Distance and significance value of each of the extreme cases identified by SPSS.

Table 14

Extreme Values for the Mahalanobis Distance of Mean Self-Reported Amount of Instruction, Mean Rating of Importance, and the Number of Sources of Knowledge of Self-Determination

	Case Number	Mahalanobis Distance	Significance Level
Highest			
1	10694666371	13.22085	.0042
2	10721064783	13.57110	.0036
3	10728824461	14.36086	.0025
4	10814355283	14.66001	.0021
5	10736525089	20.12995	.0002*
Lowest			
1	10654264198	0.12834	.9882
2	10717241355	0.17906	.9809
3	10495877505	0.18265	.9803
4	10654318359	0.21274	.9755
5	10742131905	0.26460	.9665

Note. $p < .001$ (Meyers, et al., 2006)

Using the significance level of $p < .001$ (Meyers et al., 2006), one case, 10736525089, was identified as an extreme multivariate outlier. This case was excluded from further analyses.

The last set of key variables, educators' total mean rating of importance and total mean self-reported amount of instruction for the components of self-determination, were also analyzed for multivariate outliers. Visual analysis of a scatterplot of these variables, exhibited in Figure 6, revealed potential outliers.

Figure 6. Scatterplot of Mean Ratings of Importance and Mean Amount of Instruction

The researcher calculated the Mahalanobis Distance ($n = 300$) for the variables of educators' mean ratings of important and total mean self-reported amount of instruction of the components of self-determination The distance of each case was compared to the chi-square criterion, $\chi^2(3, n = 300) = 13.82$, using the compute function of SPSS to identify the significance

value of the right-tail of the chi-square distribution. Table 15 summarizes the Mahalanobis Distance and significance value of each of the extreme cases identified by SPSS.

Table 15

Extreme Values for the Mahalanobis Distance of Mean Ratings of Importance and Mean Self-Reported Amount of Instruction

	Case Number	Mahalanobis Distance	Significance Level
Highest			
1	10718476167	13.85137	.0010
2	10721064783	13.05008	.0015
3	10694666371	13.04596	.0015
4	10728824461	12.77062	.0017
5	10718561064	11.31148	.0035
Lowest			
1	10652023614	0.02603	.9871
2	10467769102	0.02603	.9871
3	10508668666	0.02603	.9871
4	10802362039	0.02603	.9871
5	10717241355	0.00919	.9954

Using the significance level of $p < .001$ (Meyers et al., 2006), no cases were identified as extreme multivariate outliers; therefore, no additional cases were excluded from further analyses.

Quantitative Data Analyses and Results for Research Question One

For Research Question One, stepwise multiple regression was conducted to test the relationship between three independent variables (primary assignment, years of experience, and educators' ratings of importance of the components self-determination: choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge) and one dependent variable (educators' total mean self-reported amount of instruction of self-determination). Prior to

analysis, the data were tested for the assumptions of regression. The assumptions of multiple regression include outliers, sample size, normality, linearity, homoscedasticity of residuals, and multicollinearity (Pallant, 2016).

Assumptions of Regression

Outliers. The data were analyzed for univariate and multivariate outliers of primary assignment (special education or general education), years of experience, and educators' mean rating of importance of self-determination during the initial screening process. This analysis is described in the data and value cleaning section of this chapter. As this research question also included the rating of importance of the individual components of self-determination (choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge), the researcher conducted the Mahanalobis Distance for primary assignment, years of experience, educators' ratings of importance of the components of self-determination, and total mean rating of importance of self-determination. The distance of each case was compared to the chi-square criterion, $\chi^2(10, n = 300) = 29.59$, using the compute function of SPSS to identify the significance value of the right-tail of the chi-square distribution. Using the significance level of $p < .001$ (Meyers et al., 2006), 24 cases were identified as extreme multivariate outliers. These cases are exhibited in Table 16 and were excluded from analyses for Research Question One.

Table 16

Extreme Values for the Mahalanobis Distance of Primary Assignment, Years of Experience, and Educators' Rating of the Components of Self-Determination

	Case Number	Mahalanobis Distance	Significance Level
Highest			
1	10602975994	54.53	.0000*
2	10719328677	43.23	.0000*
3	10461157834	37.22	.0000*
4	10721029132	33.38	.0000*
5	10654238380	31.25	.0000*
6	10452283239	30.63	.0000*
7	10729602455	24.33	.0000*
8	10457689663	23.46	.0000*
9	10763467600	22.51	.0001*
10	10718487717	22.14	.0001*
11	10764413061	21.69	.0001*
12	10453904754	21.42	.0001*
13	10721064783	21.22	.0001*
14	10480669392	19.53	.0002*
15	10453511661	19.38	.0002*
16	10718497122	19.21	.0002*
17	10452358302	18.32	.0004*
18	10654346852	18.18	.0004*
19	10802419119	17.97	.0004*
20	10735875989	17.81	.0005*
21	10455769680	17.56	.0005*
22	10762619820	17.18	.0006*
23	10718584773	16.93	.0007*
24	10718971457	16.53	.0009*
Lowest			
1	10726494240	0.73	1.38
2	10652065508	0.72	1.42
3	10718818172	0.72	1.42
4	10652023614	0.70	1.50
5	10718476167	0.66	1.65

Note. $p < .001$ (Meyers, et al., 2006)

The researcher also reviewed the value for Cook's Distance to identify whether any strange cases identified by SPSS had any undue influence on the results of the model (Pallant, 2016). The SPSS output of casewise diagnostics identified four potential unusual cases. Tabachnick and Fidell (2013) identify that cases with a value of Cook's Distance larger than 1 are potential problems. In this model, the maximum value of Cook's Distance is .073, indicating that the unusual cases identified by SPSS were not having an undue influence on the model.

Sample size. Sample sizes must be large enough for generalizability (Pallant, 2016). Tabachnick and Fidel (2013) provide a formula for calculating adequate sample size for multiple regression based on the number of independent variables. Using this formula ($N > 50 + 8m$), where $m = 10$, the number of independent variables in this research question, N, the sample size should be greater than 130. Excluding missing values for these variables, the sample size of 276 meets the requirements of sample size as required by Tabachnick and Fidel (2013).

Normality, linearity, and homoscedasticity of residuals. Normality occurs when the distribution of values follows the "bell-shaped" curve of the population (Cohen et al., 2003). With homoscedasticity, or the constant variance of residuals, the distribution of errors of prediction have equal variance for all predicted values of the criterion (Cohen et al., 2003). Tabachnick and Fidell (2013) suggest examining the scatterplot of the standardized residuals to examine the data for normality, linearity, and homoscedasticity of residuals. Ideally, this scatterplot would exhibit a clustering of cases concentrated in the center in a roughly rectangular shape (Pallant, 2016). Any clear or systematic pattern deviating from a rectangular shape would indicate a violation of these assumptions. As exhibited in Figure 7, the scatterplot of standardized residuals, although not perfectly rectangular, does not show any systematic deviations.

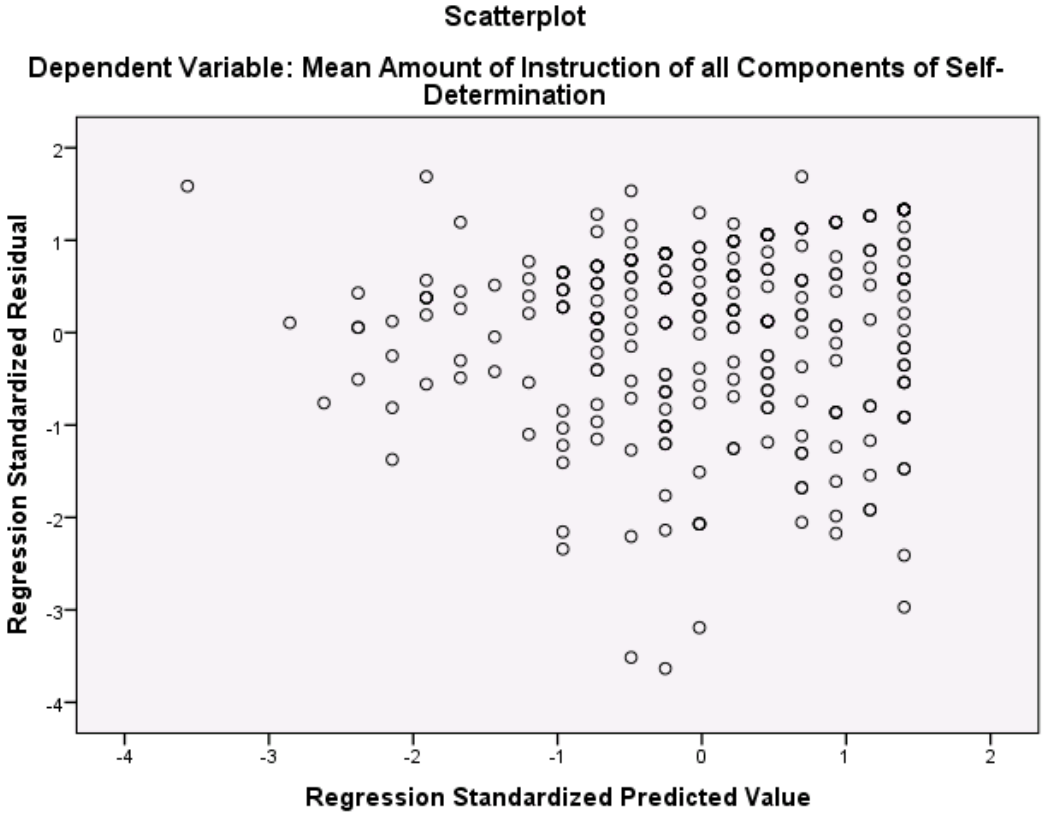

Figure 7. Scatterplot of Standardized Residuals for Mean Self-Reported Amount of Instruction

The normal probability plot of the regression standardized residual was also reviewed. Pallant (2016) suggests that if the points lie in a reasonably straight diagonal line from bottom left to top right, it is assumed that there are no major deviations from normality. As shown in Figure 8, the scatterplot shows a reasonably straight line in this diagonal pattern. Based on this observation and the scatterplot of standardized residuals, the researcher concluded that the assumptions of normality, linearity, and homoscedasticity of residuals were met.

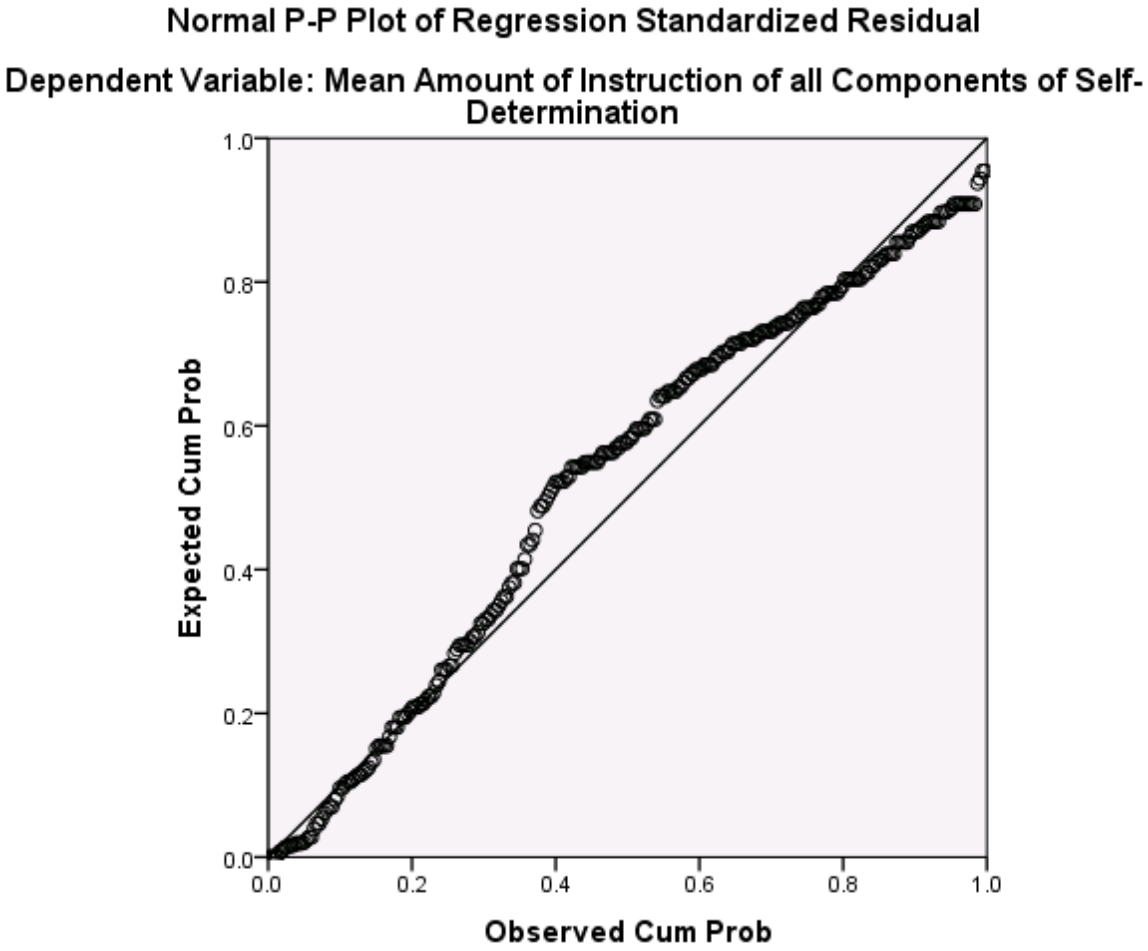

Figure 8. Normal Probability Plot of Regression Standardized Residual for Mean Amount of Instruction

Multicollinearity. Multicollinearity occurs when predictor variables are very highly correlated (Muijs, 2011). When this occurs, it becomes difficult for the regression model to calculate the individual contribution of each variable. The researcher conducted collinearity diagnostics to test this assumption. First, the researcher examined a table of correlations between each of the variables. Pallant (2016) recommends a cut off correlation of .7 to ensure that no two variables are too highly correlated with one another. As displayed in Table 17, none of the variables showed a correlation greater than .7. The assumptions of lack of multicollinearity was met for the remaining variables.

Table 17

Intercorrelations for Mean Self-Reported Amount of Instruction of Self-Determination, Ratings of Importance of the Components of Self-Determination, Primary Assignment, and Years of Experience in Education

Variable	2	3	4	5	6	7	8	9	10
1. Mean Amount of Instruction of all Components of Self-Determination	.012	.355	.054	.343	.304	.409	.286	.306	.377
2. Years of Experience in Education		.032	.023	.009	-.013	.019	.042	-.019	-.019
3. Primary Assignment Area			.166	.102	-.025	.019	.065	.151	.233
Ratings of Importance									
4. Choice-making				.659	.455	.491	.419	.340	.460
5. Decision-making					.557	.520	.406	.392	.491
6. Problem-solving						.545	.510	.490	.497
7. Goal-Setting and Attainment							.561	.495	.610
8. Self-Advocacy and Leadership								.507	.577
9. Self-Management and Self-Regulation									.560
10. Self-Awareness and Self-Knowledge									

In addition to examining a table of correlations, the researcher conducted two measures of collinearity statistics, tolerance and variance inflation factor (VIF). Tolerance is "the amount of variance in the individual variable not explained by the other predictor variables" (Muijs, 2011). A tolerance variable close to "0" indicates that most of the variance in the variable is explained by the other variables (Muijs, 2011). No tolerance variables were close to "0." VIF, the inverse of the tolerance factor (Pallant, 2016) provides an additional measure of collinearity. VIF values greater than 10 would indicate collinearity (Pallant, 2016). None of the VIF values were greater than 10. Both collinearity statistics are shown in Table 18. The researcher concluded that the assumption of an absence of multicollinearity.

Table 18

Collinearity Statistics for Research Question 1

Variable	Tolerance	*VIF*
Years of Experience in Education	1.000	1.000
Ratings of Importance		
Choice-Making	0.484	2.066
Decision-Making	0.428	2.338
Problem-Solving	0.434	2.306
Goal-Setting and Attainment	0.357	2.798
Self-Advocacy and Leadership	0.431	2.318
Self-Management and Self-Regulation	0.488	2.048
Self-Awareness and Self-Knowledge	0.361	2.773
Primary Assignment Area	0.981	1.020

Research Question One: Descriptive Statistics for Statistical Regression

After confirmation of the assumptions of regression and removal of outliers, the researcher conducted descriptive statistics of the data for Research Question One. Table 19 includes the means, standard deviations, minimum and maximum scores, and values of skewness and kurtosis for each variable.

Table 19

Descriptive Statistics for Research Question One

Variable	Min.	Max.	Mean	*SD*	Skewness	Kurtosis
Predictor						
Years of Experience	1	52	18.94	9.38	.442	.024
Ratings of Importance						
Choice-making	3	6	5.07	.77	-.539	-.057
Decision-Making	3	6	5.15	.80	-.782	.290
Problem-Solving	3	6	5.37	.69	-.785	-.058
Goal-Setting and Attainment	2	6	5.12	.84	-.756	.203
Self-Advocacy and Leadership	2	6	5.13	.81	-.740	.306
Self-Management and Self-Regulation	3	6	5.22	.80	-.771	-.052
Self-Awareness and Self-Knowledge	3	6	5.01	.86	-.538	-.383
Criterion						
Mean Amount of Instruction	1.57	6	4.44	.85	-.471	.235

Normality. The values of kurtosis and skewness of a normal distribution would be zero (Pallant, 2016). Kurtosis and skewness values between -1 and 1 are generally considered acceptable (Hair, Anderson, Tatham, & Black, 1998; Meyers, 2006). As indicated in Table 19, all of the variables exhibited measures of skewness and kurtosis within this threshold. The researcher concluded that predictor and criterion variables for Research Question 1 were normally distributed.

Research Question One: Statistical Regression Analysis and Results

A stepwise multiple regression was conducted with the predictor variables of years of experience (1-52), primary assignment (special education or general education), the rating of importance of choice-making (1-6), the rating of importance of decision-making (1-6), the rating of importance of problem-solving (1-6), the rating of importance of goal-setting and attainment (1-6), rating of importance of self-advocacy and leadership (1-6), the rating of importance of self-management and self-regulation (1-6), rating of importance of self-awareness and self-knowledge (1-6), and the criterion variable of total mean self-reported amount of instruction of the components of self-determination (1-6). As described earlier in this chapter, the data were screened for multivariate outliers and checked for the assumptions of normality, linearity, multicollinearity, and homoscedasticity, resulting in a sample of $n = 276$ for the analysis once extreme outliers were excluded.

When calculating the stepwise multiple regression, SPSS excluded the variables of years of experience in education, primary assignment, rating of importance of decision-making, rating of importance of problem-solving, rating of importance of self-advocacy and leadership, and rating of importance of self-management and self-regulation. SPSS excludes predictors when the significance is less than .05, indicating that the variable would not have had a significant

impact on the model's ability to predict the criterion variable, total mean self-reported amount of instruction. The variance in the model, therefore, is predicted solely by three variables: rating of importance of goal-setting and attainment, rating of importance of choice-making, and rating of importance of self-awareness and self-knowledge. Each of the three variables contributed significantly to the model. The total variance of the total mean self-reported amount of instruction explained by the model was 21.4%, $F(3, 212) = 19.196$, $p < .000$. The model summary and ANOVA results are summarized in Tables 20 and 21, respectively.

Table 20

Stepwise Multiple Regression Analysis Summary for Variables of Ratings of Importance Predicting Mean Self-Reported Amount of Instruction

Step and Predictor Variable	*B*	*SE B*	*β*	R^2	ΔR^2	ΔF	Sig.
Step 1: Goal-Setting and Attainment	.416	.063	.409	.167	.167	43.00	.000
Step 2: Choice-Making	.223	.078	.203	.198	.031	8.27	.004
Step 3: Self-Awareness and Self-Knowledge	.159	.079	.160	.214	.015	4.09	.044

Table 21

Stepwise Multiple Regression ANOVA[a] *Summary for Variables of Ratings of Importance Predicting Mean Self-Reported Amount of Instruction*

Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	26.204	1	26.204	43.001	.000[b]
	Residual	130.407	214	.609		
	Total	156.611	215			
2	Regression	31.077	2	15.539	26.365	.000[c]
	Residual	125.534	213	.589		
	Total	156.611	215			
3	Regression	33.454	3	11.151	19.196	.000[d]
	Residual	123.157	212	.581		
	Total	156.611	215			

[a]Dependent Variable: Mean Amount of Instruction of all Components of Self-Determination
[b]Predictors: (Constant), Rating of Importance of Goal-Setting and Attainment
[c]Predictors: (Constant), Rating of Importance of Goal-Setting and Attainment, Rating of Importance of Choice-making
[d]Predictors: (Constant), Rating of Importance of Goal-Setting and Attainment, Rating of Importance of Choice-making, Rating of Importance of Self-Awareness and Self-Knowledge

Results. Table 21 shows the coefficients of the stepwise regression model that predict the scores for total mean self-reported amount of instruction of the components of self-determination. The stepwise multiple regression model suggested that educators who rated the components of goal-setting and attainment, choice-making, and self-awareness and self-knowledge with higher levels of importance are more likely to report higher mean amounts of instruction of all components of self-determination. SPSS excluded the variables of years of experience in education, primary assignment, rating of importance of decision-making, rating of importance of problem-solving, rating of importance of self-advocacy and leadership skills, and

rating of importance of self-management and self-regulation. These variables did not have a significant impact on the model. This indicates that educators' years of experience or primary assignment of either special education or general education did not significantly predict their total mean self-reported amount of instruction of the components of self-determination. Additionally, ratings of importance of decision-making, problem-solving, self-advocacy and leadership, and self-management and self-regulation did not significantly predict the total mean self-reported amount of instruction of the components of self-determination.

The non-directional hypothesis for Research Question One, there will be a significant relationship between the predictor variables (primary assignment, years of experience, or educators' ratings of importance of the components of self-determination) and the criterion variable of educators' self-reported amount of instruction for self-determination, was accepted as the variables of ratings of importance of goal-setting and attainment, choice-making, and self-awareness and self-knowledge predicted the total mean self-reported amount of instruction.

Quantitative Data Analyses and Results for Research Question Two

For Research Question Two, multiple correlations were conducted to test the relationship between (a) educators' self-reported amount of instruction of the components of self-determination, (choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge, total mean self-reported amount of instruction) (b) educators' rating of importance of the components of self-determination (i.e., choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge, total mean self-reported amount of instruction) and (c) the sum of numbers of sources of knowledge on self-determination (Undergraduate Training,

Graduate Training, District In-Service Training, Training Conference or Workshop, Education Text, Professional Journal, Article, Colleagues, Unidentified Source).

Prior to analysis of the correlations, the researcher screened the data for outliers. The researcher visually analyzed a scatterplot matrix of all three variables. This matrix is exhibited in Figure 9.

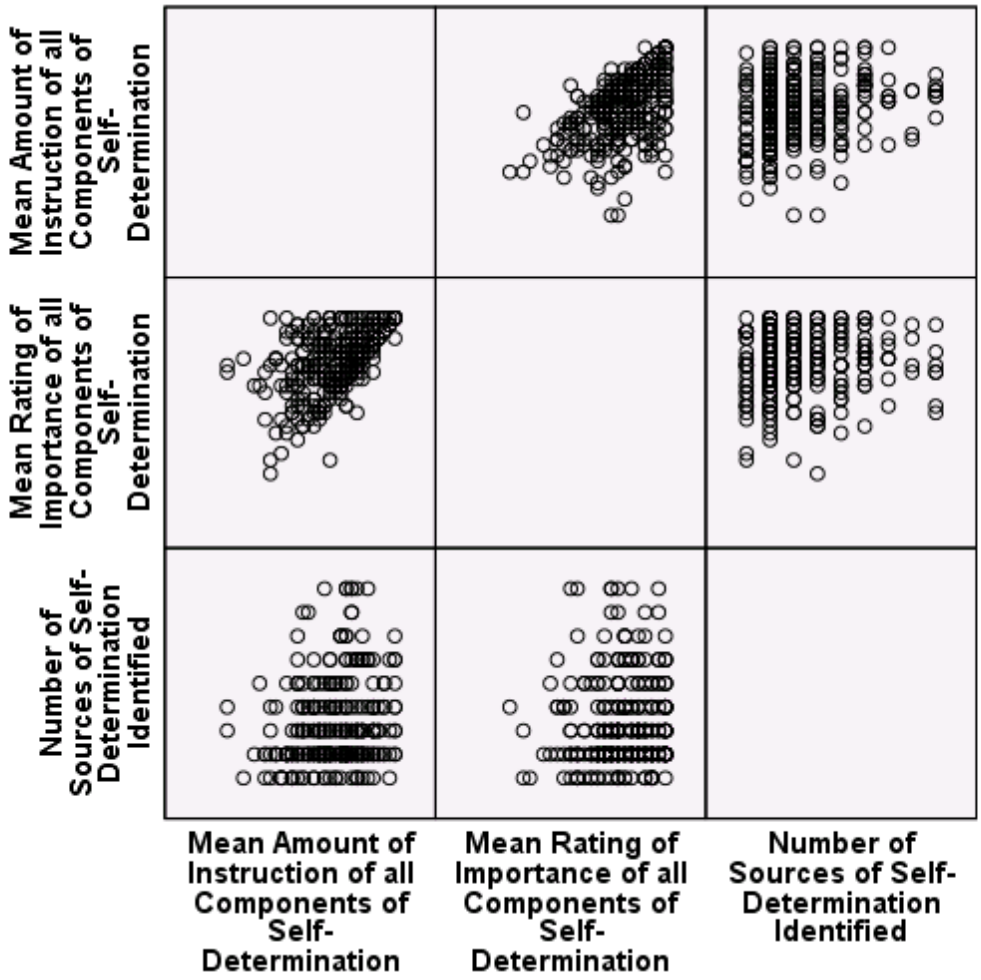

Figure 9. Scatterplot Matrix for Research Question 2

Although the scatterplots show some cases outside of the primary cluster, the researcher concluded that there were no extreme variables. Additionally, the research had previously conducted the Mahalanobis Distance and significance value of each of the extreme cases

identified by SPSS for total mean self-reported amount of instruction and mean rating of importance. These values are exhibited in Table 15. Using the significance level of $p < .001$ (Meyers et al., 2006), no cases were identified as extreme multivariate outliers in the Mahalanobis Distance calculated for the variables of total mean self-reported amount of instruction and mean rating of importance. The researcher concluded that there were no extreme outliers and all assumptions were met.

Data Analysis for Research Question Two

The researcher conducted Pearson correlations for 17 variables. The variables included educators' self-reported amount of instruction in each component of self-determination (i.e., choice-making, decision-making, problem solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge), educators' rating of importance in each component of self-determination (i.e., choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge), the mean rating of importance, the total mean self-reported amount of instruction, and the sum of the number of sources of knowledge of self-determination.

The researcher reviewed the descriptive statistics to ensure the number of cases were correct. Each variable had 300 cases, which indicated no missing values. A summary of the descriptive statistics for the variables and correlation coefficients are included in Table 22.

Table 22

Descriptive Statistics for Mean Rating of Importance, Mean Self-Reported Amount of Instruction, and Number of Sources of Knowledge of Self-Determination

	Minimum	Maximum	*Mean*	*SD*
Ratings of Importance				
Choice-making	2.00	6.00	5.03	0.82
Decision-Making	1.00	6.00	5.08	0.87
Problem-Solving	2.00	6.00	5.32	0.76
Goal-Setting and Attainment	2.00	6.00	5.05	0.90
Self-Advocacy and Leadership	1.00	6.00	5.03	0.93
Self-Management and Self-Regulation	1.00	6.00	5.15	0.91
Self-Awareness and Self-Knowledge	1.00	6.00	4.91	0.96
Mean Rating of all Components	2.71	6.00	5.08	0.66
Self-Reported Amounts of Instruction				
Choice-making	1.00	6.00	4.42	1.07
Decision-Making	1.00	6.00	4.46	1.08
Problem-Solving	2.00	6.00	4.74	0.98
Goal-Setting and Attainment	1.00	6.00	4.34	1.18
Self-Advocacy and Leadership	1.00	6.00	4.25	1.23
Self-Management and Self-Regulation	1.00	6.00	4.44	1.23
Self-Awareness and Self-Knowledge	1.00	6.00	4.17	1.23
Mean Amount of all Components	1.57	6.00	4.40	0.86
Number of Sources of Knowledge of Self-Determination Identified	0.00	8.0	2.24	1.84

Note. $N = 300$

The researcher reviewed the table of correlations to identify the nature and significance of any of the relationships between variables. The size of the value of the correlation indicates the strength of the correlation. A correlation of "0" indicates no relationship (Pallant, 2016). As shown in Table 23, all the correlations between variables showed positive values above 0, indicating the possibility of a relationship.

Table 23

Pearson Correlations for Number of Sources of Knowledge, Ratings of Importance, and Self-Reported Amount of Instruction of Self-Determination

Variables	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Number of Sources of Knowledge	.139*	.093	-.004	.013	.056	.006	.059	.069	.190**	.144*	.058	.105	.185**	.117*	.178**	.188**
Ratings of Importance																
2. Choice-making		.621**	.411**	.482**	.351**	.331**	.460**	.692**	.525**	.346**	.233**	.276**	.277**	.188**	.234**	.391**
3. Decision-Making			.520**	.475**	.377**	.357**	.479**	.727**	.305**	.549**	.263**	.186**	.253**	.149**	.243**	.364**
4. Problem-Solving				.500**	.485**	.476**	.506**	.735**	.159**	.212**	.552**	.199**	.248**	.214**	.247**	.340**
5. Goal-Setting and Attainment					.559**	.496**	.595**	.791**	.278**	.237**	.314**	.568**	.346**	.220**	.335**	.439**
6. Self-Advocacy and Leadership						.510**	.553**	.743**	.084	.096	.182**	.192**	.518**	.204**	.241**	.297**
7. Self-Management and Self-Regulation							.556**	.721**	.093	.151**	.255**	.218**	.193**	.506**	.246**	.321**
8. Self-Awareness and Self-Knowledge								.805**	.259**	.242**	.276**	.292**	.309**	.318**	.542**	.431**
9. Mean Rating of all Components									.322**	.347**	.390**	.372**	.414**	.348**	.405**	.495**
Ratings of Instruction																
10.Choice-making										.577**	.457**	.492**	.439**	.423**	.491**	.729**
11.Decision-Making											.528**	.476**	.462**	.433**	.493**	.745**
12.Problem-Solving												.532**	.465**	.461**	.477**	.730**
13.Goal-Setting and Attainment													.516**	.472**	.529**	.766**
14.Self-Advocacy and Leadership														.450**	.581**	.754**
15.Self-Management and Self-Regulation															.576**	.735**
16.Self-Awareness and Self-Knowledge																.798**
17.Mean Rating of all Components														*		

Note. **Correlation is significant at 0.01 level (2-tailed); *Correlation is significant at 0.05 level (2-tailed); effect size: small: $0.10 \leq r < .3$; medium: $.3 \leq r < .5$; large: $r \geq 0.50$.

Results for Research Question Two

Relationships between 17 variables are revealed in Table 23. Represented are the ratings of importance and amounts of instruction of the 7 components of self-determination, the mean rating of importance and self-reported amount of instruction, and sum of number of sources of knowledge of self-determination. These variables were investigated using Pearson product-moment correlation coefficients and Cohen's (1988) conventions for effect size. Cohen (1988) gives the following interpretation for effect size: (a) small, $0.10 \leq r < .3$; (b) medium, $.3 \leq r < .5$; (c) large, $r \geq 0.50$.

Preliminary analyses were conducted to ensure no violations of normality, linearity, and homoscedasticity. Of the 136 correlations, 39 showed strong, positive correlations ($r \geq .50$), 46 showed moderate, positive correlations ($.3 \leq r < .5$), 40 showed weak, positive correlations ($.10 \leq r < .3$), and 11 did not show any significant correlation. All correlations between ratings of importance and self-reported amount of instruction were strong and positive, meaning that as educators rated the components of self-determination as being more important, they showed a tendency to report higher amounts of instruction of these components. Correlations that were not significant were between the variables of the self-reported amount of instruction of choice-making and the rating of importance of self-advocacy and leadership skills, the self-reported amount of instruction of choice-making and the rating of importance of self-management and self-regulation, and the self-reported amount of instruction of decision-making and the rating of importance of self-advocacy and leadership.

The variable of sum of sources of knowledge of self-determination had 7 out of 16 significant correlations with the other variables. The only variable of rating of importance that showed a significant relationship with the number of sources of knowledge of self-determination

was the rating of importance of choice-making. There were multiple significant correlations between the sum of number of sources of knowledge of self-determination and variables of self-reported amount of instruction including the components of choice-making, decision-making, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge, and the total mean self-reported amount of instruction. Educators who had a higher sum of number of sources of knowledge of self-determination reported greater amounts of instruction in choice-making, decision-making, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge, and total mean self-reported amount of instruction, but educators with a higher sum of number of sources of knowledge of self-determination only showed a higher rating of importance of choice-making, not any of the other variables of importance. This indicates relationships between the sum of number of sources of knowledge and instruction, but only one area of importance.

The non-directional hypothesis for Research Question Two, there will be a significant correlation in educators' self-reported amount of instruction of self-determination, their rating of importance of self-determination skills, and the number of sources of their knowledge of self-determination, was accepted.

Exploratory Analysis of Sum of Sources of Knowledge of Self-Determination

As the correlational analysis showed relationships between the amount of sources of knowledge of self-determination and other variables, the researcher conducted additional analyses to acquire a deeper understanding of the range of different types of sources of knowledge of self-determination reported by the participants. Table 24 includes the frequency and percentage for each sum of number of sources of knowledge of self-determination (0-8) by current role.

Table 24

Number of Sources of Knowledge of Self-Determination by Current Role

# of Sources	General Education *N* =109		Special Education *N* = 77		Related Service *N* = 57		Total *N* = 243	
	n	%	n	%	n	%	n	%
0	15	13.8	6	7.8	3	5.3	24	9.9
1	47	43.1	32	41.6	14	24.6	93	38.3
2	18	16.5	13	16.9	15	26.3	46	18.9
3	14	12.8	13	16.9	7	12.3	34	14
4	7	6.4	3	3.9	6	10.5	16	6.6
Total 0-4	101	92.7	67	87.0	45	78.9	213	87.7
5	5	4.6	4	5.2	7	12.3	16	6.6
6	1	0.01	2	2.6	3	5.3	6	2.5
7	0	0	2	2.6	1	1.8	3	1.2
8	2	1.8	2	2.6	1	1.8	5	2.1
Total 5-8	8	7.3	10	13.0	12	21.1	30	12.3
Total	109		77		57		243	

As exhibited in Table 24, the role of general education showed the greatest proportion of educators who identified zero sources of knowledge of self-determination (13.8%), while the role of related service shows the smallest proportion of educators who identified zero sources of knowledge of self-determination (5.3%). Visual inspection revealed that the role areas of related

service (21.1%) and special education (13%) showed greater proportions of educators in the higher sum of number of sources of self-determination categories (number of sources = 5, 6, 7, 8) when compared to general education (7.3%). The researcher decided to investigate these group differences further. As exhibited in Figure 10, the role of related service shows the highest mean number of sources of knowledge of self-determination (M = 2.75) when compared to special education (M = 2.22) and general education (M = 1.84).

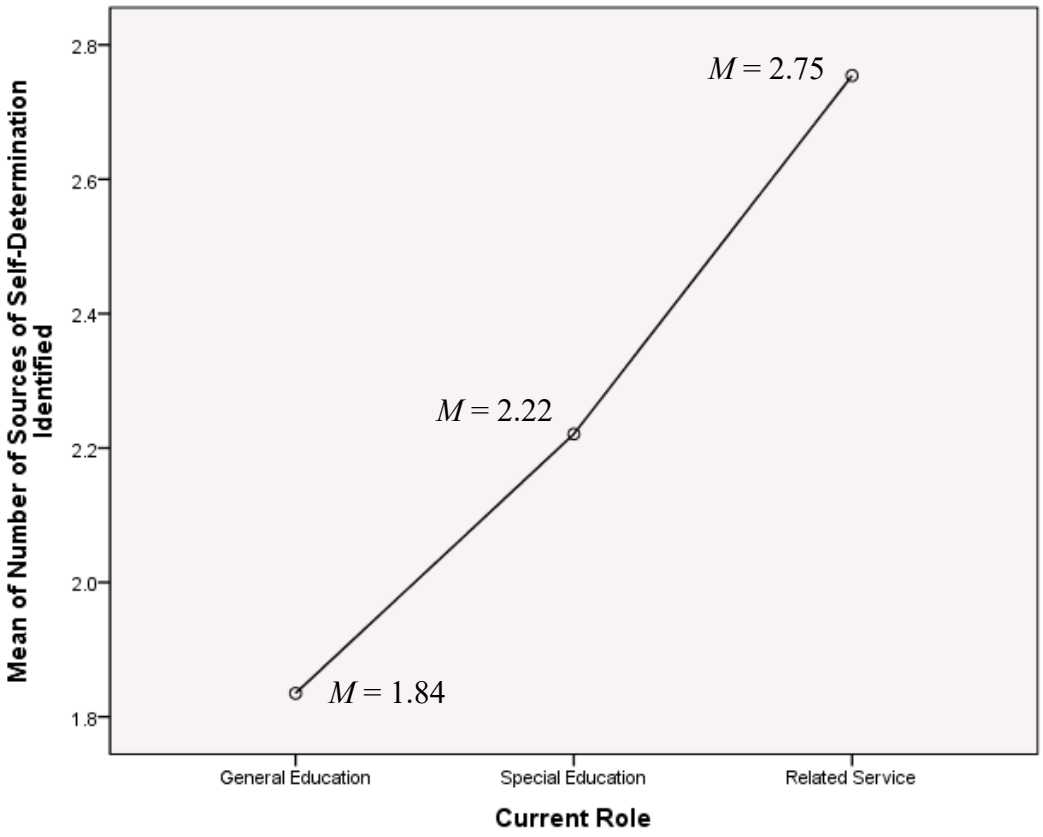

Figure 10. Mean Plot of Number of Sources of Self-Determination by Current Role

Quantitative Data Analyses and Results for Research Question Three

For the third research question, a one-way multivariate analysis of variance (MANOVA) was used to test the non-directional hypothesis that there will be a significant difference between

educators' total mean rating of importance placed on self-determination skills and the total mean self-reported amount of instruction of the components of self-determination based on their current role. This analysis was used to test differences between the independent variable of current role with three levels (a) general education, (b) special education, and (c) related services on the measures of two dependent variables (a) educators' mean rating of the importance of the components of self-determination and (b) educators' total mean self-reported amount of instruction of the components. There are a number of assumptions that the data must conform to for analysis with MANOVA. Preliminary assumption testing was conducted to check for sample size, normality, outliers, linearity, multicollinearity and singularity, and homogeneity of variance-covariance matrices.

Sample Size

To conduct a MANOVA, there must be more cases in each cell than dependent variables (Pallant, 2016). Notably, the sample size for Research Question 3 ($N = 243$) is smaller than for the other analyses ($N = 300$). The variable of current role did not include participants outside of the role areas of general education, special education, and related service, reducing the overall sample size. For this research question, there must be more than two cases in each cell. As shown in Table 25 of descriptive statistics, the number of cases in each cell exceeds two.

Table 25

Mean Scores and Standard Deviations for Measures of Mean Self-Reported Amount of Instruction and Mean Rating of Importance as a Function of Current Role

		Mean Amount of Instruction		Mean Rating of Importance	
	N	*M*	*SD*	*M*	*SD*
General Education	109	4.20	.88	4.92	.74
Special Education	77	4.45	.79	5.17	.59
Related Service	57	4.84	.67	5.17	.63
Total	243	5.43	.84	5.06	.68

Table 25 also revealed that the current role groups have unequal sample sizes. If there are at least 20 cases in the smallest cell, MANOVA is robust to violations of multivariate normality, even when there are unequal samples sizes between groups (Pallant, 2016). Although the MANOVA will be relatively robust to violations, the researcher carefully reviewed the homogeneity of variance-covariance matrices, described later in this Chapter (Table 29) to ensure it was not affected by the unequal sample sizes between groups.

Normality and Outliers

Significance tests of MANOVA are based on the assumption of normal distribution. Although tests of MANOVA assume a normal distribution, it is "reasonably robust to moderate violations of normality" (Pallant, 2016, p. 291). A sample size of 20 or greater in each cell ensures robustness (Tabachnick & Fidell, 2013). Each cell in this data set contained a sample size of 20 or greater. In addition to the robustness of this sample, the researcher conducted statistical measures of normality for the dependent variables.

The variables of mean rating of importance and total mean self-reported amount of instruction were previously screened for normality. As exhibited in Table 18, the kurtosis and skewness values were between -1 and 1, a generally accepted level (Hair, Anderson, Tatham, & Black, 1998; Meyers, 2006). The researcher also visually inspected histograms of the frequencies of instruction and importance with the adjusted sample size ($N = 243$) for this research question, shown in Figures 11 and 12, concluding that both variables were relatively normally distributed.

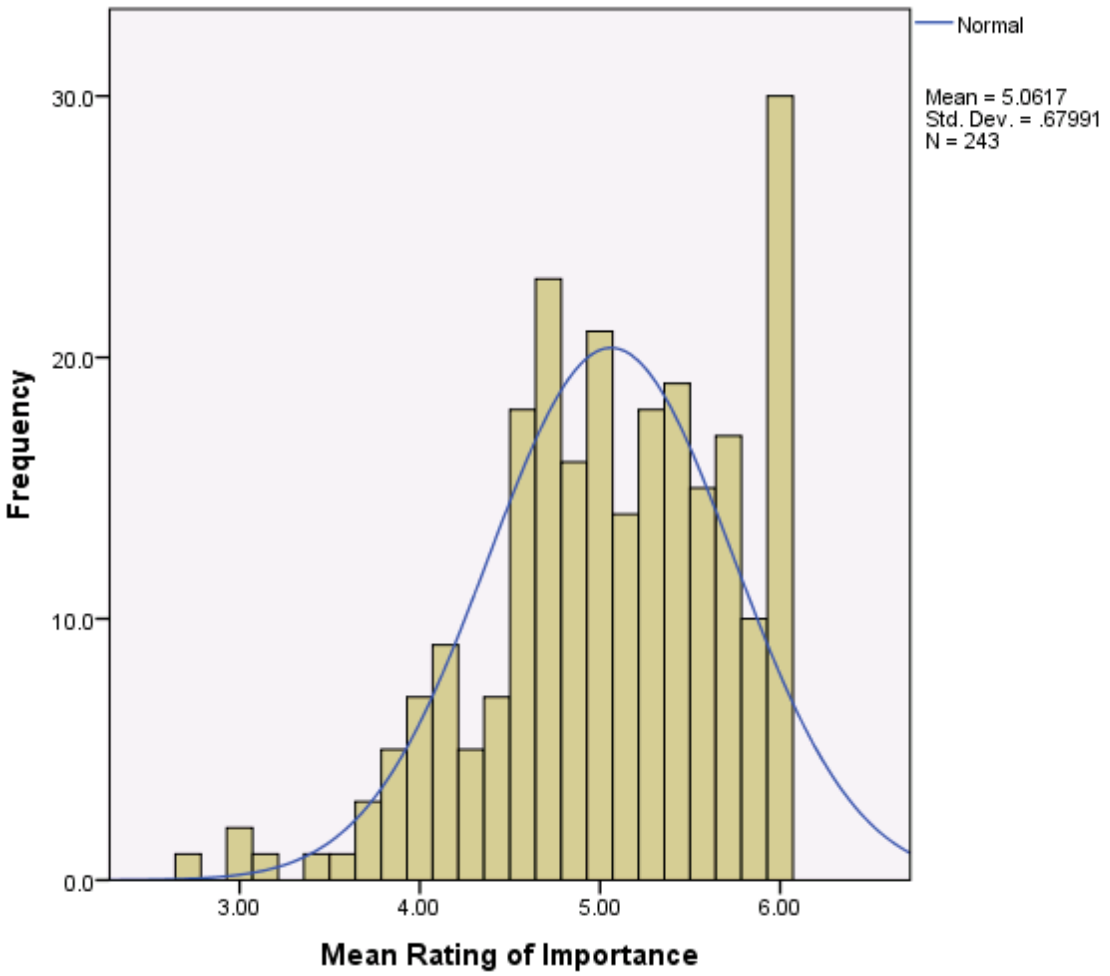

Figure 11. Histogram of Mean Ratings of Importance

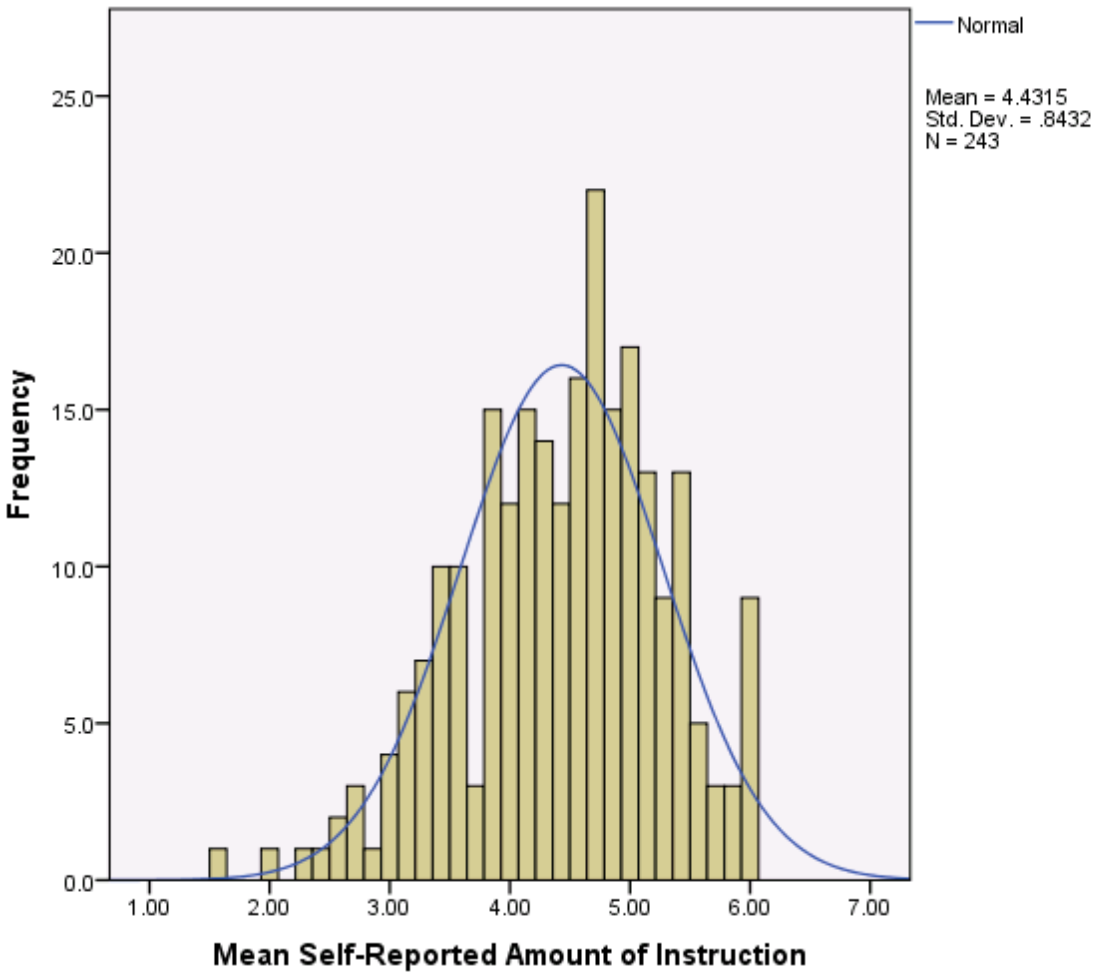

Figure 12. Histogram of Mean Self-Reported Amount of Instruction

The researcher had also calculated the Mahalanobis Distance ($N = 300$) for the variables of educators' mean ratings of importance and total mean self-reported amount of instruction of self-determination when conducting initial data screening. Table 15 summarized the Mahalanobis Distance and significance value of each of the extreme cases identified by SPSS. Using the significance level of $p < .001$ (Meyers et al., 2006), no cases were identified as extreme multivariate outliers; therefore, no cases were excluded from this analysis.

As this research question included analyses between groups, the normality of the dependent variables, mean rating of importance and total mean self-reported amount of instruction, were inspected for normality by current role. First, the histograms of mean rating of

importance and mean self-reported amount of instruction were reviewed. Figures 13 and 14 show that each of these distributions were relatively normally distributed.

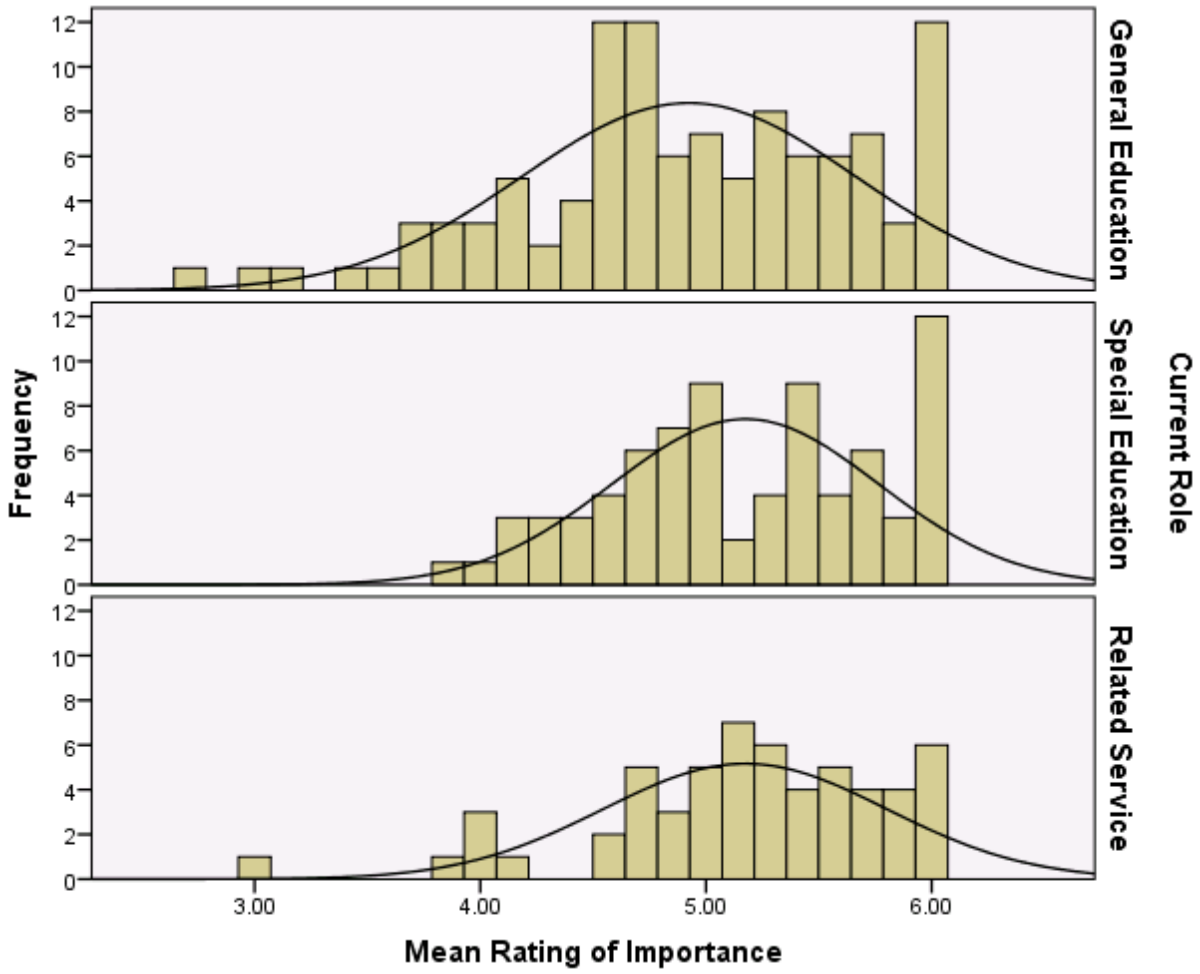

Figure 13. Histograms of Mean Rating of Importance by Role

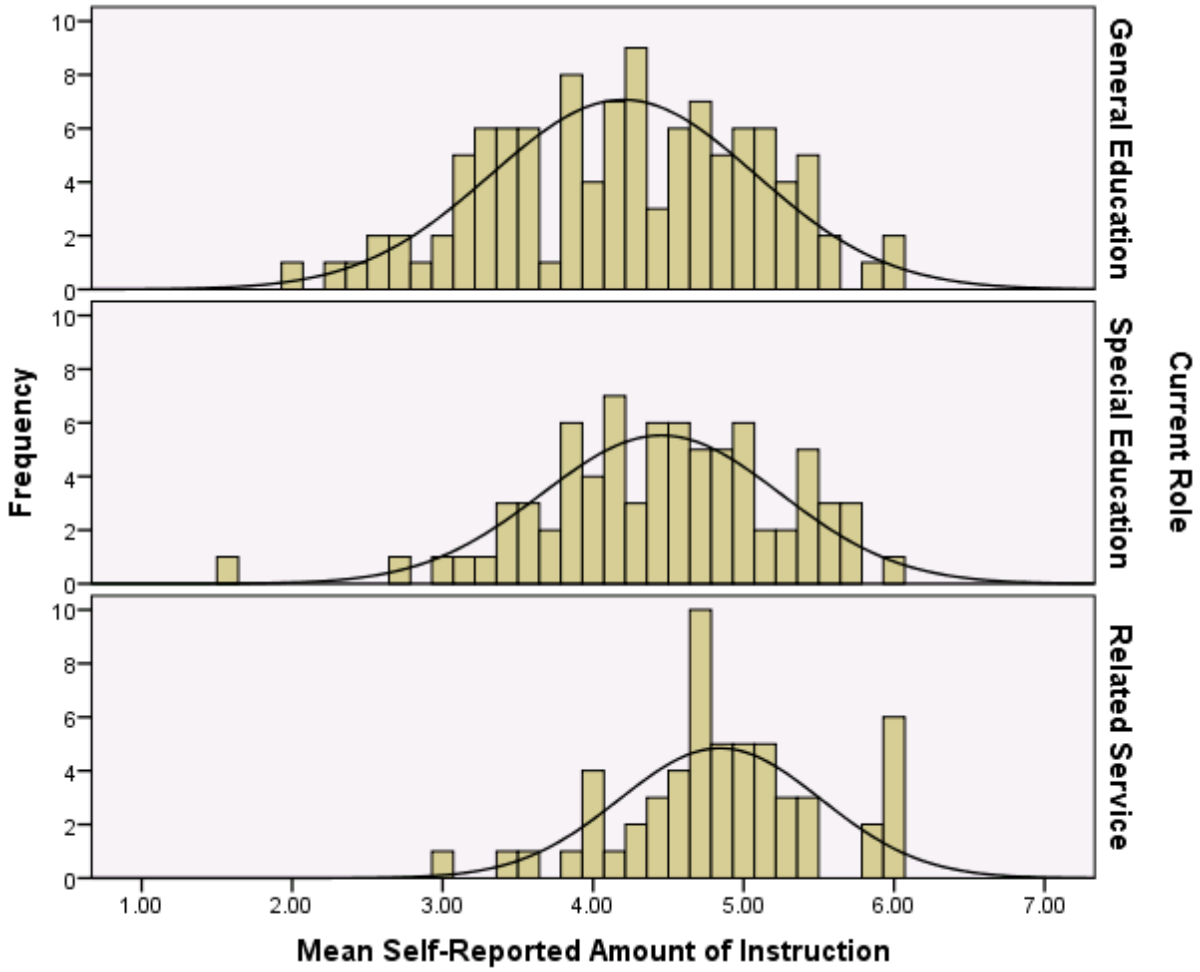

Figure 14. Histograms of Mean Self-Reported Amount of Instruction by Current Role

Second, the skewness and kurtosis of each of the dependent variables were reviewed for normality. These values are displayed in Table 26.

Table 26

Skewness and Kurtosis of Mean Rating of Importance and Mean Self-Reported Amount of Instruction by Current Role

	General Education		Special Education		Related Service	
	Importance	Instruction	Importance	Instruction	Importance	Instruction
Skewness	-.488	-.181	-.210	-.601	-1.027	-.198
Kurtosis	-.043	-.577	-.936	1.14	1.505	.276

The skewness and kurtosis of both dependent variables for each role are within the acceptable limit of -2 and +2 (George & Mallery, 2010), indicating normality. The researcher also reviewed two statistical tests of normality, Kolmogorov-Smirnov and Shapiro-Wilk statistics. As displayed in Table 27, none of the variables had a Kolmogorov-Smirnov or Shapiro-Wilk statistic that reached significance ($p < .001$; Meyers, 2006), also indicating normality.

Table 27

Tests of Normality for Mean Rating of Importance and Mean Self-Reported Amount of Instruction by Current Role

		Kolmogorov-Smirnov			Shapiro-Wilk		
	Current Role	Statistic	Df	Sig.	Statistic	df	Sig.
Importance	General Education	.088	109	.038	.961	109	.003
	Special Education	.108	77	.027	.949	77	.004
	Related Service	.113	57	.070	.925	57	.002
Instruction	General Education	.069	109	.200	.985	109	.279
	Special Education	.059	77	.200	.972	77	.081
	Related Service	.107	57	.157	.963	57	.075

Linearity

The researcher conducted a scatterplot of the dependent variables of educators' total mean self-reported amount of instruction and educators mean rating of the importance of components of self-determination with a reference line of the equation. While the scatterplot shows some points that vary from the line of best fit, they were not considered for deletion as the Mahalanobis analysis (Table 15) did not identify these values as extreme. The assumption of linearity was considered met.

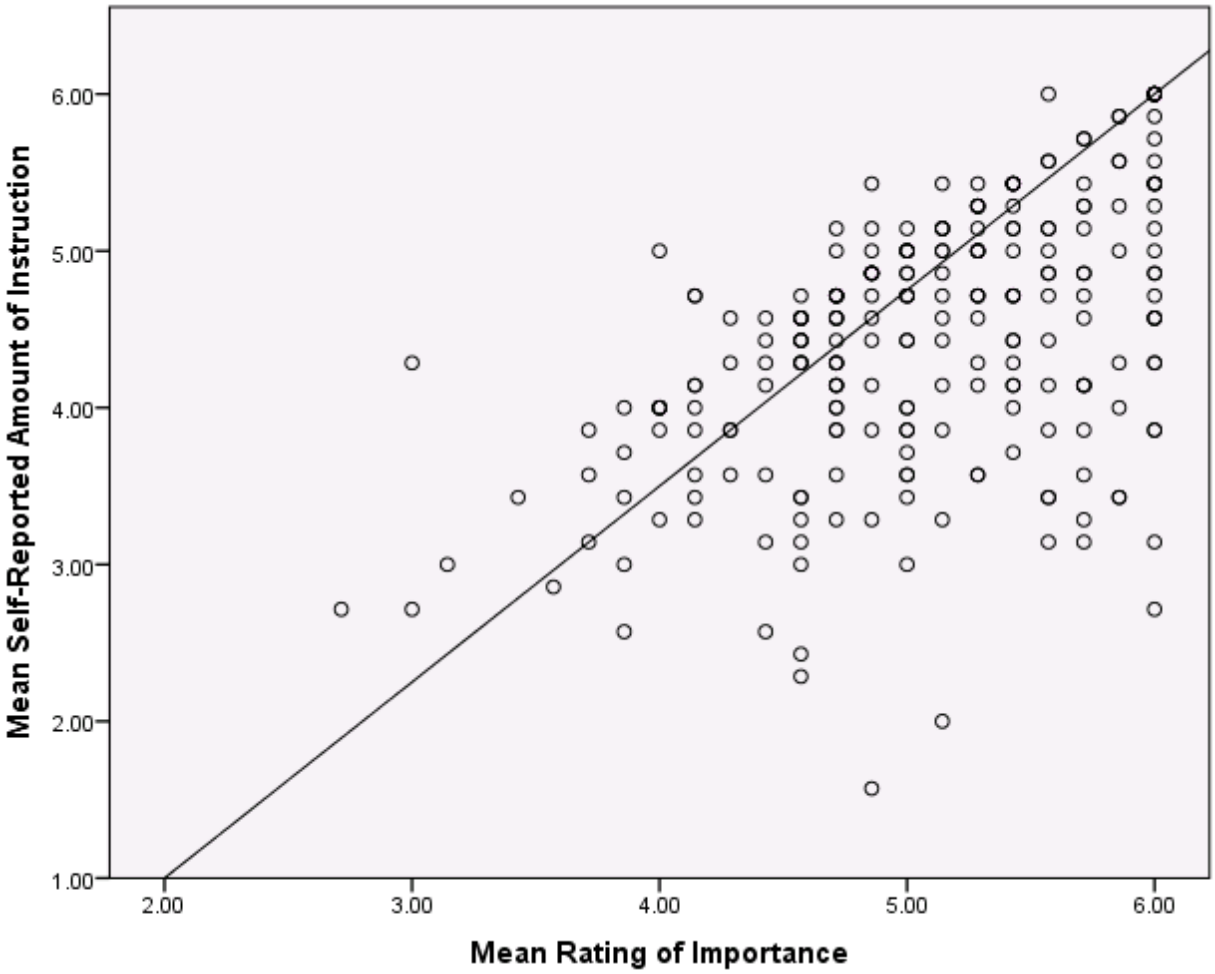

Figure 15. Scatterplot of Mean Self-Reported Amount of Instruction and Importance

Multicollinearity and Singularity

To conduct a MANOVA, the dependent variables should be moderately correlated (Pallant, 2016). High correlations (> .8) may be cause for concern. As exhibited in Table 23, the dependent variables of total mean self-reported amount of instruction and mean rating of importance are moderately correlated without exceeding the threshold of .8. Additionally, the researcher conducted the Bartlett's test of sphericity to examine whether there was enough correlation between the dependent variables to proceed with the multivariate analysis. The Bartlett test of sphericity computes the overall significance of all correlations within a correlation matrix (Hair et al., 2014). Shown in Table 28, a significant degree of intercorrelation does exist (p = .000). The assumptions of multicollinearity and singularity were considered met.

Table 28

Bartlett's Test of Sphericity on the Mean Rating of Importance and Mean Self-Reported Amount of Instruction

Approx. Chi-Square	83.572
Df	1
Sig.	0.000

Homogeneity of Variance-Covariance Matrices

The researcher conducted a Box's Test of Equality of Covariance Matrices to test the assumption of homogeneity of variance. If the significance value is larger than .001, the homogeneity of variance-covariance is met (Pallant, 2016). As shown in Table 29, the significance level is .109 and the researcher confirmed that the assumption of homogeneity of variance-covariance matrices was met.

Table 29

Box's Test of Equality of Covariance Matrices

Box's M	10.519
F	1.730
df1	6
df2	476716.373
Sig.	.109

Note. Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

Equality of Variance for Each Variable

The researcher reviewed the Levene's Test of Equality of Error Variances to analyze the assumption of equality of variance for each variable. As shown in Table 30, the variable of total mean self-reported amount of instruction has a significance level of less than .05, indicating that there is a violation of the assumption of equality of variance for this variable (Pallant, 2016). To address this violation, Tabachnick and Fidell (2013) suggest setting a more conservative alpha level for determining significance for this variable in the univariate *F*-test. The researcher implemented this technique to address this error and set an alpha level of .025 rather than the conventional .05 level for the Wilk's Lambda Multivariate Test of Significance.

Table 30

Levene's Test of Equality of Error Variances

	F	*df1*	*df2*	Sig.
Mean Rating of Importance	2.339	2	240	.099
Mean Amount of Instruction	4.053	2	240	.019

Note. Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Data Analysis

The researcher conducted a multivariate analysis of variance (MANOVA) to test the non-directional hypothesis that there will be a significant difference between educators' rating of importance of the components of self-determination and their self-reported amount of instruction of the components of self-determination based on their current role. First, the researcher reviewed the results for the Wilks' Lambda statistic which indicates if there were statistically significant differences amongst groups on a linear combination of the dependent variables (Pallant, 2016).

Table 31

Wilk's Lambda Multivariate Test of Significance

Value	*F*	Hypothesis DF	Error df	Sig.	Partial Eta Squared
.896	6.739	4.000	478.000	.000	.053

As shown in Table 31, the Wilks' Lambda value was .896 with a significance level of .000, partial eta squared = .053, indicating that there is a difference amongst groups with about 5.3% of the total dependent variable variance accounted for by current role. With this result, the researcher investigated which dependent variables the groups differed on based on current role.

The Tests of Between Subjects Effects in Table 32 exhibit information on how the dependent variables differed based on current role. Using a Bonferroni adjustment, the researcher set an alpha level of .025 (.05/2) to reduce the chance of a Type 1 error with the separate analyses (Pallant, 2016). Using this alpha level, both dependent variables, mean rating of importance and total mean self-reported amount instruction, showed a significant difference based on current role (special education, general education, related service). The partial Eta

Squared represents the proportion of variance in the dependent variables that can be explained by the current role. The value for mean rating of importance in this case is .034 which according to Cohen's criteria (Cohen, 1988), is a small effect size (Pallant, 2016). The value for total mean self-reported amount of instruction in this case is .091 which according to Cohen's criteria (Cohen, 1988), is a moderate effect size (Pallant, 2016).

Table 32

Tests of Between-Subjects Effects by Current Role

Source	Dependent Variable	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.	Partial Eta Squared
Corrected Model	Rating of Importance	3.750[a]	2	1.875	4.163	.017	.034
	Amount of Instruction	15.577[b]	2	7.789	11.946	.000	.091
Intercept	Rating of Importance	5873.616	1	5873.61	13038.05	.000	.982
	Amount of Instruction	4588.602	1	4588.60	7037.66	.000	.967
Current Role	Rating of Importance	3.750	2	1.88	4.16	.017	.034
	Amount of Instruction	15.577	2	7.79	11.95	.000	.091
Error	Rating of Importance	108.120	240	.45			
	Amount of Instruction	156.482	240	.65			
Total	Rating of Importance	6337.796	243				
	Amount of Instruction	4944.163	243				
Corrected Total	Rating of Importance	111.870	242				
	Amount of Instruction	172.059	242				

Note. *R* Squared = .034 (Adjusted *R* Squared = .025) *R* Squared = .091 (Adjusted *R* Squared = .083)

To identify which differences between groups were significant, the researcher conducted post-hoc analysis using Tukey's Honestly Significant Difference test (HSD). This test compares the difference between each pair of means with appropriate adjustment for the multiple testing (Pallant, 2016). To conduct Tukey's HSD, the assumption of homogeneity of variance must be

met (Pallant, 2016). The Box's Test of Equality of Covariance Matrices previously conducted (Table 29) showed that this assumption was met.

As exhibited in Tables 33 and 34, multiple significant mean differences of total mean self-reported amount of instruction and mean rating of importance were identified between educators based on their current role. Educators with special education as their current role reported the highest mean rating of importance of the components of self-determination (M = 5.17) which was significantly higher than the mean rating of importance reported by educators with general education as their current role (M = 4.92). Although related service personnel had almost the same mean rating of importance (M = 5.17; n = 57) as special educators (M = 5.17; n = 77), the difference between related service personnel and general educators on mean rating of importance was not significant due to the smaller sample size of related service personnel. Additionally, educators with related service as their current role reported the highest total mean self-reported amount of instruction of the components of self-determination (M = 4.84) which was significantly higher than both educators with the role of general education (M = 4.20) and special education (M = 4.45).

Table 33

Mean Scores and Standard Deviations for Measures of Mean Self-Reported Amount of Instruction and Mean Rating of Importance as a Function of Current Role with Post Hoc Analysis

Ratings	General Education (1) *n* = 109		Special Education (2) *n* = 77		Related Service (3) *n* = 57		Sig. Post Hoc
	M	*SD*	*M*	*SD*	*M*	*SD*	
Mean Rating of Importance	4.92	.74	5.17	.59	5.17	.63	2 > 1
Mean Amount of Instruction	4.20	.88	4.45	.79	4.84	.67	3 > 1 & 2

Note. The numbers in the parentheses in column heads refer to the numbers used for illustrating significant differences in the "Post Hoc" column.

Table 34

Post-Hoc Multiple Comparisons with Tukey HSD for Mean Self-Reported Amount of Instruction and Mean Rating of Importance as a Function of Current Role

Dependent Variable	(I) CurRole	(J) CurRole	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Mean Rating of Importance	General Education	Special Education	-.2504*	.09992	.034	-.4861	-.0148
		Related Service	-.2489	.10971	.062	-.5077	.0098
	Special Education	General Education	.2504*	.09992	.034	.0148	.4861
		Related Service	.0015	.11728	1.000	-.2751	.2780
	Related Service	General Education	.2489	.10971	.062	-.0098	.5077
		Special Education	-.0015	.11728	1.000	-.2780	.2751
Mean Amount of Instruction	General Education	Special Education	-.2522	.12021	.092	-.5357	.0313
		Related Service	-.6441*	.13199	.000	-.9554	-.3328
	Special Education	General Education	.2522	.12021	.092	-.0313	.5357
		Related Service	-.3919*	.14109	.016	-.7247	-.0592
	Related Service	General Education	.6441*	.13199	.000	.3328	.9554
		Special Education	.3919*	.14109	.016	.0592	.7247

Note. Based on observed means. The error term is Mean Square (Error) = .652.
*The mean difference is significant at the .05 level.

Results for Research Question Three

A one-way between-groups multivariate analysis of variance was performed to investigate current role differences (general education, special education, related services) in mean ratings of importance and self-reported mean amounts of instruction of the components of self-determination. Two dependent variables were used: mean rating of importance and total mean self-reported amount of instruction. The independent variable was current role. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity and singularity, with no serious violations noted. The assumption of equality of variance for the variable of total mean self-reported amount of instruction was violated. The researcher addressed this violation by setting an alpha level of .025 for the Wilk's Lambda statistic, rather than the conventional .05 level (Tabachnick & Fidell, 2013).

There was a statistically significant difference between educators working in general education, special education, and related services on the combined dependent variables, $F(4, 478) = 6.74$, $p = .000$; Wilks' Lambda = .896, partial eta squared = .053. When the results for the dependent variables were considered separately, there was a significant difference on the dependent variables of mean rating of importance $F(2, 240) = 4.16$, $p = .017$, partial eta squared = .03 (small effect size) and total mean self-reported amount of instruction $F(2, 240) = 11.95$, $p = .000$, partial eta squared = .091 (medium effect size) on the independent variable of current role.

Post-hoc comparisons using the Tukey HSD test indicated that the mean rating of importance for educators with special education as their current role ($M = 5.17$, $SD = .592$) was significantly higher than the mean rating of importance for educators with general education as their current role ($M = 4.92$, $SD = .741$), meaning that special educators rated the components of

self-determination as more important than general educators. Post-hoc comparisons also indicated that the total mean self-reported amount of instruction for educators with related service as their role (M = 4.85, SD = .671) was significantly higher than both the total mean self-reported amount of instruction for educators with general education as their role (M = 4.20, SD = .879) and the total mean self-reported amount of instruction for educators with special education as their current role (M = 4.45, SD = .794), meaning that related service personnel provided instruction in the components of self-determination significantly more than general or special educators.

Based on the results of the statistical analyses for Research Question Three, the non-directional hypothesis that there will be a significant difference between educators' total mean self-reported amount of instruction of the components of self-determination and their mean rating of importance of the components of self-determination based on their current role was accepted.

Qualitative Analyses and Results for Research Question Four

Research Question Four was used to explore the perceptions of educators on the benefits of self-determination and strategies to achieve it. Open-ended survey responses to five questions were coded based on the theoretical constructs of self-determination, operationalized essential behavioral components of self-determination, and emergent themes. The five questions included:

1. In your own words, define self-determination as it refers to an individual's life.
2. Please identify the three most important components of self-determination.
3. In your opinion, is self-determination important? Why or why not?

4. In your opinion, do schools and educators support self-determination for students? Why or why not?
5. In your opinion, what do schools/educators need to provide instruction in self-determination skills?

The researcher implemented qualitative methodology aligned to post-positivist epistemology of critical realism. Critical realism recognizes that variables are measurable, but all observations have some measure of subjective error (Trochim & Conjoint.ly, 2020). For this reason, multiple measures are necessary to represent variables as accurately as possible. The mixed methods nature of this study provided multiple measures of educators' perspectives for comparison.

One of the intentions of a mixed methods study design is to compare and contrast the qualitative and quantitative data to enhance interpretation (Gall, Gall, & Borg, 2007). Coding should be customized to the disciplinary concerns of the study (Saldaña, 2016). The researcher implemented content analysis using the themes of the essential characteristics and component behaviors of self-determination. Content analysis, "a systematic coding and categorizing approach used for exploring large amounts of textual information," allows for the analysis of data both qualitatively and quantitatively (Vaismoradi, Turunen, & Bondas, 2013). The analyses also included coding by current role for comparison across findings. Additionally, exploratory analyses of educators' familiarity with self-determination, ratings of the helpfulness of self-determination, ratings of the components of self-determination, reasons educators do not provide instruction in self-determination, and sources of knowledge of self-determination were conducted to investigate educators' perspectives. In the following sections, exploratory analyses, frequency coding, and value coding is described for Research Question 4.

Exploratory Analyses

The researcher conducted exploratory analyses to investigate educators' perspectives of self-determination and identify descriptive statistics for comparison to previous research studies on this topic. Included in this section are descriptive analyses on educators' familiarity with self-determination, their ratings of the individual components of self-determination, reasons why they would not provide instruction in the components of self-determination, their sources of knowledge of self-determination, and how helpful they thought self-determination was in academics and post-school outcomes.

Educators' familiarity of self-determination. Most educators indicated that they were familiar with self-determination. As exhibited in Figure 16, over 89% (267/300) of participants indicated that they were familiar with the term.

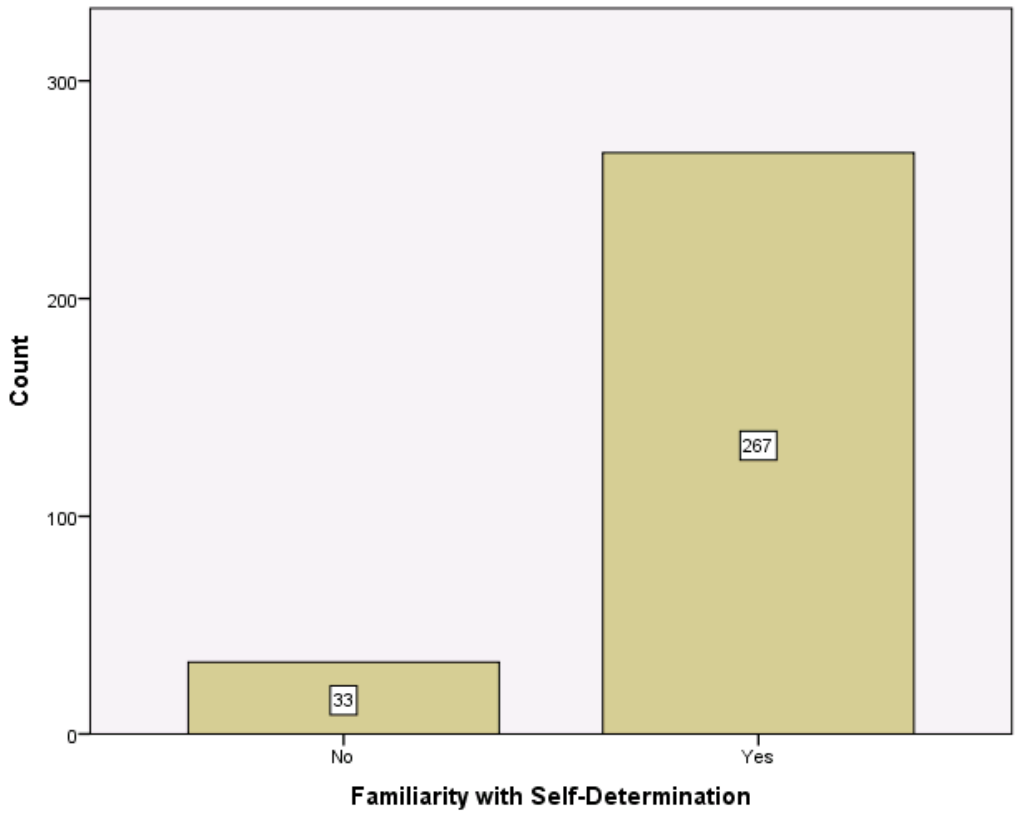

Figure 16. Educators' familiarity with self-determination.

Further analyses of educators' familiarity with self-determination revealed that a slightly greater proportion of special education and related service personnel reported familiarity with self-determination, when compared to general educators. Table 35 displays these proportions by role.

Table 35

Familiarity with Self-Determination by Current Role

	General Education *n* = 109		Special Education *n* = 77		Related Service *n* = 57	
	n	%	*n*	%	*n*	%
Familiar with Self-Determination	91	83.49	72	93.51	54	94.74

Ratings of the individual components of self-determination. The researcher investigated the educators' ratings of the individual components of self-determination. As displayed in Table 36, problem-solving was rated highest for both ratings of importance and self-reported amount of instruction. The component of self-awareness and self-knowledge was the lowest rating for both levels of importance and instruction.

Table 36

Mean Ratings of the Components of Self-Determination

	Component of Self-Determination						
Variable	Choice-making	Decision-Making	Problem-Solving	Goal-Setting and Attainment	Self-Advocacy	Self-Monitoring and Self-Regulation	Self-awareness and Self-Knowledge
Importance	5.03	5.07	5.37	5.05	5.03	5.15	4.93
Instruction	4.42	4.46	4.74	4.34	4.25	4.44	4.17

Ratings of importance and self-reported amount of instruction. The researcher compared the ratings of importance and self-reported amount of instruction of the components of

self-determination by current role. As shown in Figure 17, across all roles, the mean rating of importance of the components of self-determination was higher than the total mean self-reported amount of instruction of the components of self-determination.

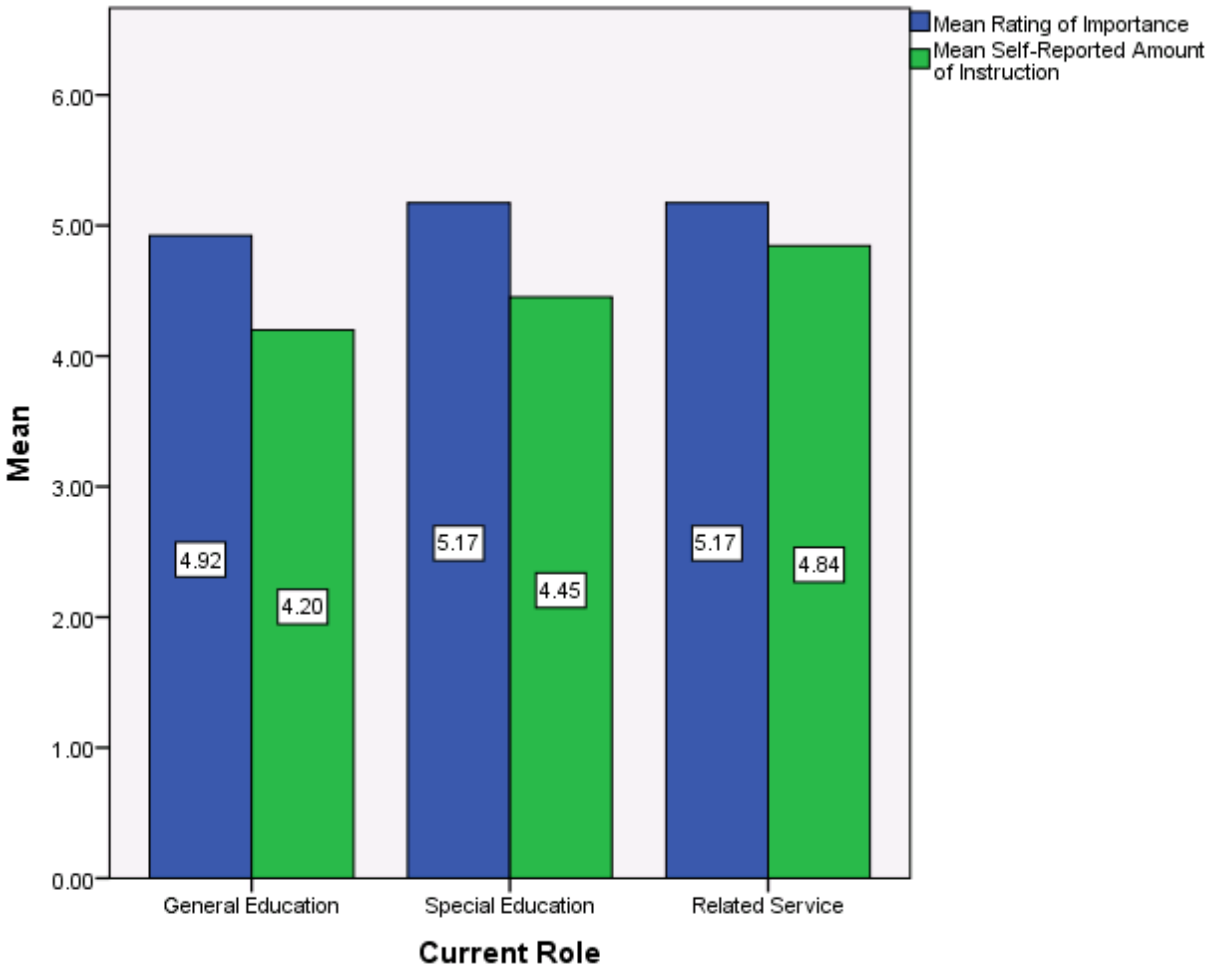

Figure 17. Mean Ratings of Importance and Mean Self-Reported Amount of Instruction by Current Role.

The difference between ratings of importance and self-reported amount of instruction was also evident in each of the components of self-determination across most roles. In only two areas, problem-solving and goal-setting and attainment, general educators reported a higher amount of instruction than rating of importance. These ratings are displayed in Table 37.

Table 37

Ratings of Importance and Amount of Instruction for the Components of Self-Determination by Current Role

	General Education		Special Education		Related Service	
	Importance	Instruction	Importance	Instruction	Importance	Instruction
Choice-making	4.85	4.17	5.18	4.47	5.05	4.95
Decision-Making	4.90	4.23	5.14	4.46	5.26	5.05
Problem-Solving	5.27	5.63	5.33	4.70	5.33	5.05
Goal-Setting & Attainment	4.95	5.17	5.10	4.43	5.16	4.72
Self-Advocacy	4.89	4.05	5.12	4.33	5.02	4.58
Self-Management & Self-Regulation	4.97	4.22	5.27	4.64	5.21	4.68
Self-Awareness & Self-Knowledge	4.63	3.95	5.08	4.16	5.18	4.88

Reasons educators do not provide instruction in self-determination. Participants were asked to identify reasons that they may not provide instruction in the components of self-determination. The survey included a checklist of possible responses and participants could check one or more reasons. The frequency of responses for all educators ($N = 300$) for each item in the checklist is listed in Table 38. Two areas, "You don't have sufficient time to provide instruction in these areas" ($n = 132$, 44%) and "There are other areas in which your students need instruction more urgently" ($n = 134$; 44.67%) were selected by almost half of the respondents. The reason identified by the least number of participants was "you find it difficult to empathize with your students," ($n = 3$; 1.00%).

Table 38

Frequency Table of Reasons Educators Do Not Provide Instruction in Self-Determination

Reason	*n*	%
Your students have adequate skills in these areas.	68	22.67
Your students have difficulty communicating effectively.	63	21.00
Your students are too young to learn these skills.	39	13.00
You find it difficult to empathize with your students.	3	1.00
You have difficulty collaborating with your colleagues or administrators.	21	7.00
You don't have sufficient time to provide instruction in these areas.	132	44.00
You don't have the latitude to provide instruction in these areas. (e.g., because of the course content requirements, state testing requirements, etc.)	88	29.33
There are other areas in which your students need instruction more urgently (e.g., academic areas, challenging behavior).	134	44.67
Your students would not benefit from instruction in these areas because of their characteristics (e.g., their passivity, level of their ability or capacity to engage in behavior)	23	7.67
You haven't had sufficient training or information on teaching in these areas.	76	25.33
Someone else is responsible for instruction in this area. (Please indicate responsible party below)	27	9.00

Note. As participants could select multiple reasons, the n values do not represent discrete categories; % was calculated using the formula n / N; $N = 300$.

The researcher also conducted frequency analyses of reasons why educators do not provide instruction in self-determination by current role. As there was an unequal distribution of educators in each role, the researcher compared the proportions of respondents for each reason by current role for comparison. As exhibited in Table 39 and Figure 18, when compared to related service personnel and special educators, general educators showed a much higher

proportion of respondents who identified that they did not have time to provide instruction in self-determination (n = 66, 60.55%), they did not have the latitude to provide instruction in self-determination (n = 40, 36.70%), that there were other areas in which students need instruction more urgently (n = 58, 53.21%), and that they haven't had sufficient training or information on teaching in these areas (n = 32; 29.36%). Special educators showed the greatest proportion of respondents for the reason that students have difficulty communicating effectively (n = 29, 37.66%). Related service personnel showed the smallest proportion of respondents who identified that they did not have the latitude to provide instruction in self-determination (n = 10, 17.54%), that there were other areas that students need instruction more urgently (n = 23, 40.35%) and that they haven't had sufficient training or information on teaching in these areas (n = 8, 14.04%).

Table 39

Frequency of Reasons Educators Do Not Provide Instruction in Self-Determination by Current Role

	General Education *N* = 109		Special Education *N* = 77		Related Service *N* = 57		Total *n* = 243	
	n	%	*n*	%	*n*	%	*n*	%
Your students have adequate skills in these areas.	27	24.77	12	15.58	13	22.80	52	21.40
Your students have difficulty communicating effectively	12	11.01	29	37.66	16	28.07	57	23.46
Your students are too youn g to learn these things.	18	16.51	5	6.49	9	15.79	32	13.17
You find it difficult to empathize with your students	2	1.83			1	1.75	3	1.23
You have difficulty collaborating with your colleagues or administrators.	12	11.01	3	3.89	6	10.52	21	8.64
You don't have sufficient time to provide instruction in these areas.	66	60.55	23	29.87	20	35.09	109	44.86
You don't have the latitude to provide instruction in these area.	40	36.70	20	25.97	10	17.54	70	28.81
There are other areas in which your students need instruction more urgently.	58	53.21	37	48.05	23	40.35	118	48.56
Your students would not benefit from instruction in these areas because of their characteristics.	6	5.50	10	12.98	2	3.51	18	7.41
You haven't had sufficient training or information on teaching in these areas.	32	29.36	15	19.48	8	14.04	55	22.63
Someone else is responsible for instruction in this area.	9	8.26	4	5.19	8	14.04	21	8.64

Note: Total *N* for Table 39 is less than Table 38 as it did not include participants that were not part of the three roles of general education, special education, or related service.

Most of the educators identified multiple reasons that they did not provide instruction in self-determination (n = 192). The mean number of reasons that they did not provide instruction in self-determination for all educators (n = 300) was 2.25. General Educators showed the highest mean number of reasons (m = 2.59) when compared to special educators (m = 2.05) and related service personnel (m = 2.04).

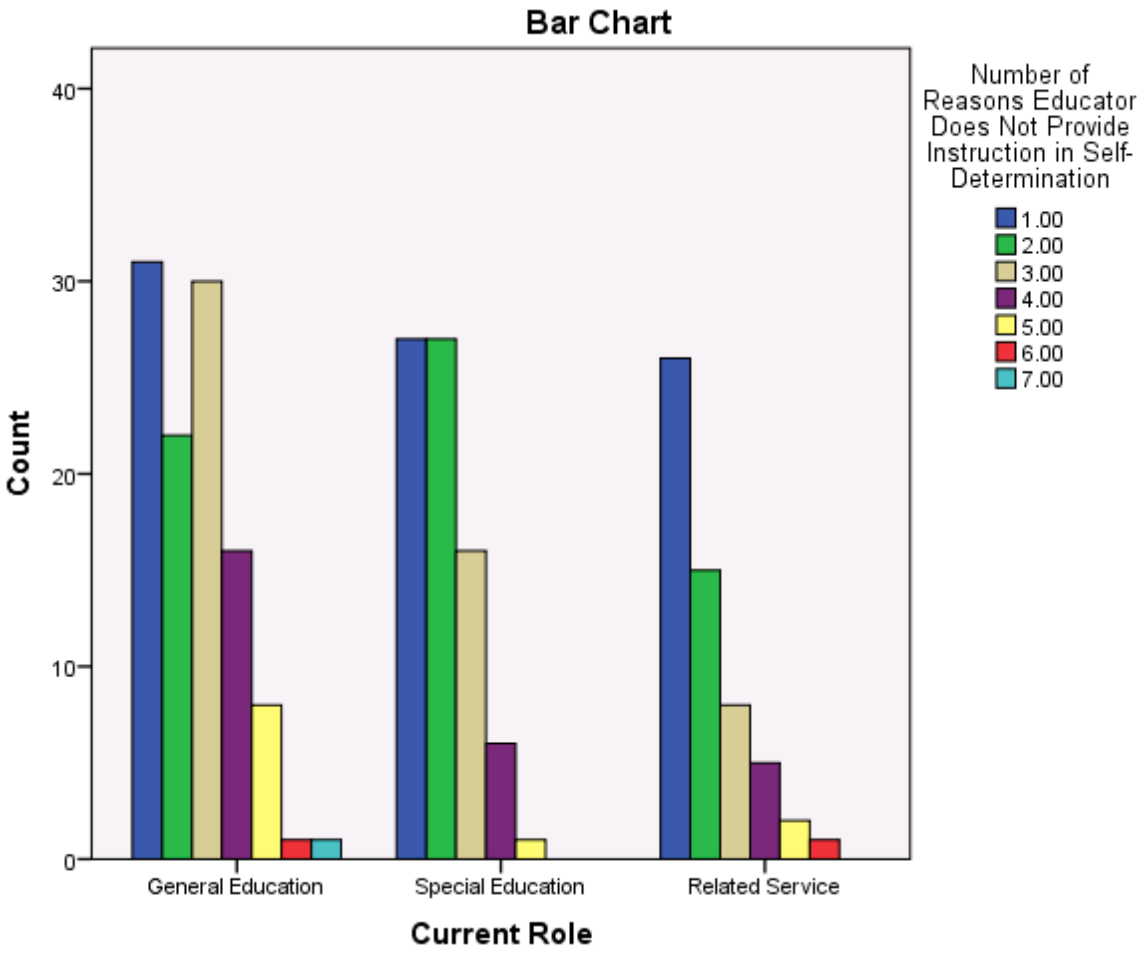

Figure 18. Bar Chart of Number of Reasons Educator Does Not Provide Instruction in Self-Determination by Current Role

Sources of knowledge of self-determination. The total frequencies of all educators' (N = 300) reported number of sources of knowledge of self-determination are exhibited in Figure 19. Most educators learned about self-determination through a single source of knowledge and

the source of knowledge most often identified was graduate training (42%). Educators also identified other sources of knowledge of self-determination, including books/reading (*n* =3), geo-political (*n* =1), life/common knowledge (*n* =14), coaching/athletics (*n* = 3), grammar school (*n* = 1), other education (*n* = 2), career (*n* = 3), self (*n* = 1), therapy for child (*n* = 1), news (*n* = 2), other training (*n* = 1), Internet (*n* = 1), parents (*n* =1), Regional Special Education Technical Assistance Center (*n* = 1), and I don't know or n/a (*n* =5).

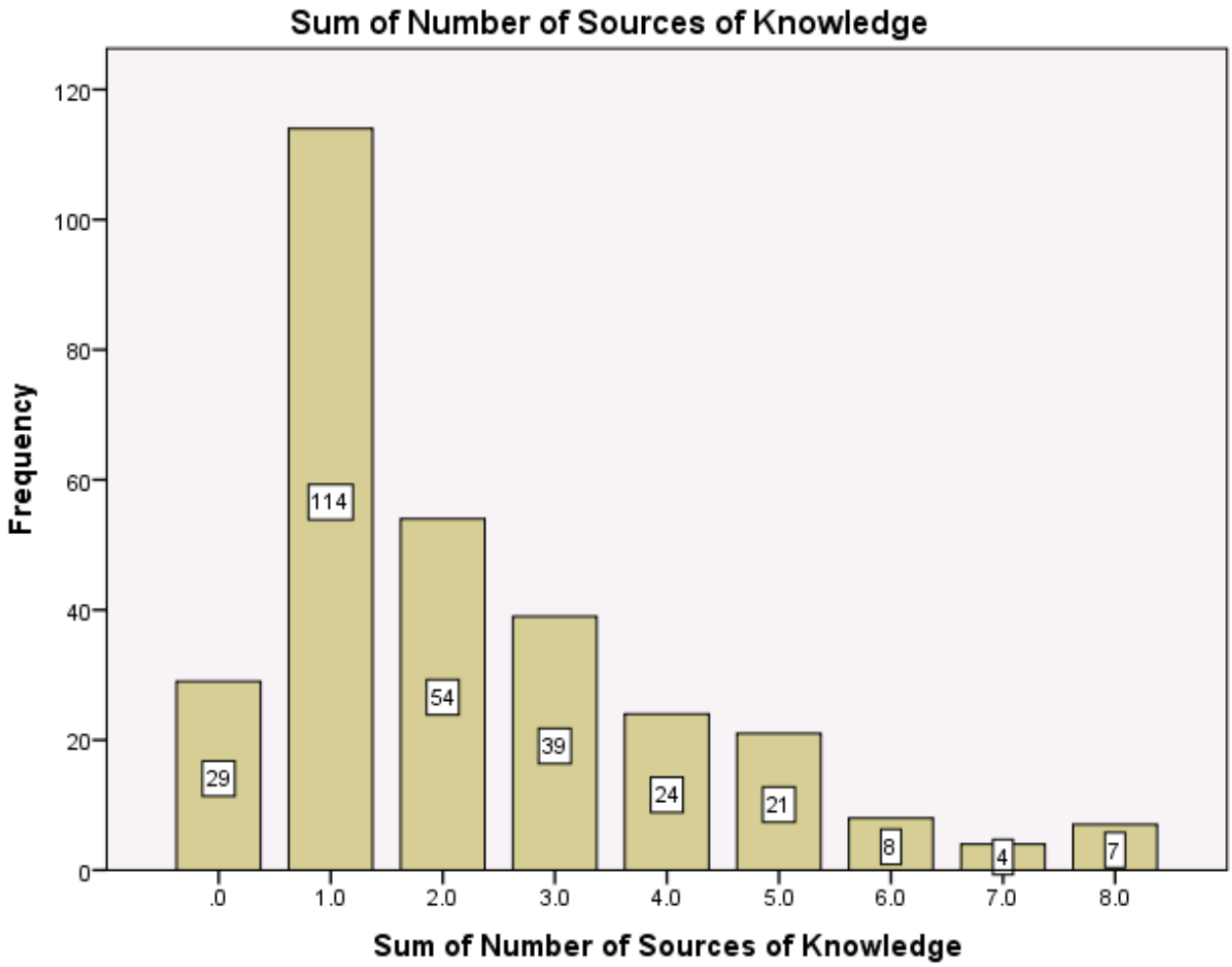

Figure 19. Bar Graph of Sum of Number of Sources of Knowledge of Self-Determination

The researcher also explored the frequencies of sources of knowledge by current role in Table 40 and Figure 20. In almost all categories of sources of knowledge, the current role of related service showed a higher percentage of educators who selected each category. Related service personnel showed a higher percentage of educators who had learned about self-determination from the categories of undergraduate training, graduate training, education text, professional journal, article, and colleagues. Special educators showed the greatest proportion of educators who identified conferences and workshops as their source of knowledge. General educators showed the greatest proportion of educators who identified their source of knowledge as other or unidentified and the smallest proportions in all other areas except professional journal or article. In other words, general educators learned about the topic largely on their own and without participating in professional learning.

Table 40

Frequency of Sources of Knowledge of Self-Determination by Current Role

	General Education *n* = 109		Special Education *n* = 77		Related Service *n* = 57		Total Roles *n* = 243		All Educators *N* = 300	
	n	%	*n*	%	*n*	%	*n*	%	*N*	%
Undergraduate Training	23	21.10	20	25.97	16	28.07	59	24.28	72	24.00
Graduate Training	37	33.94	32	41.56	35	61.40	104	42.80	125	41.67
Inservice Conference or Workshop	10	9.17	21	27.27	10	17.54	41	16.87	53	17.67
Conference or Workshop	18	16.51	31	40.26	19	33.33	68	27.98	85	28.33
Education Text	25	22.94	21	27.27	21	36.84	67	27.57	89	29.67
Professional Journal	23	21.10	12	15.58	19	33.33	54	22.22	76	25.33
Article	27	24.77	16	20.78	15	26.32	58	23.87	77	25.67
Colleagues	14	12.84	12	15.58	16	28.07	42	17.28	51	17.00
Other	21	19.27	6	7.79	2	3.51	29	11.93	37	12.33
Unidentified	2	0.92	0		4	7.02	6	2.47	7	2.33
Total	200		171		157		528		672	

Note. Educators could select multiple sources of knowledge

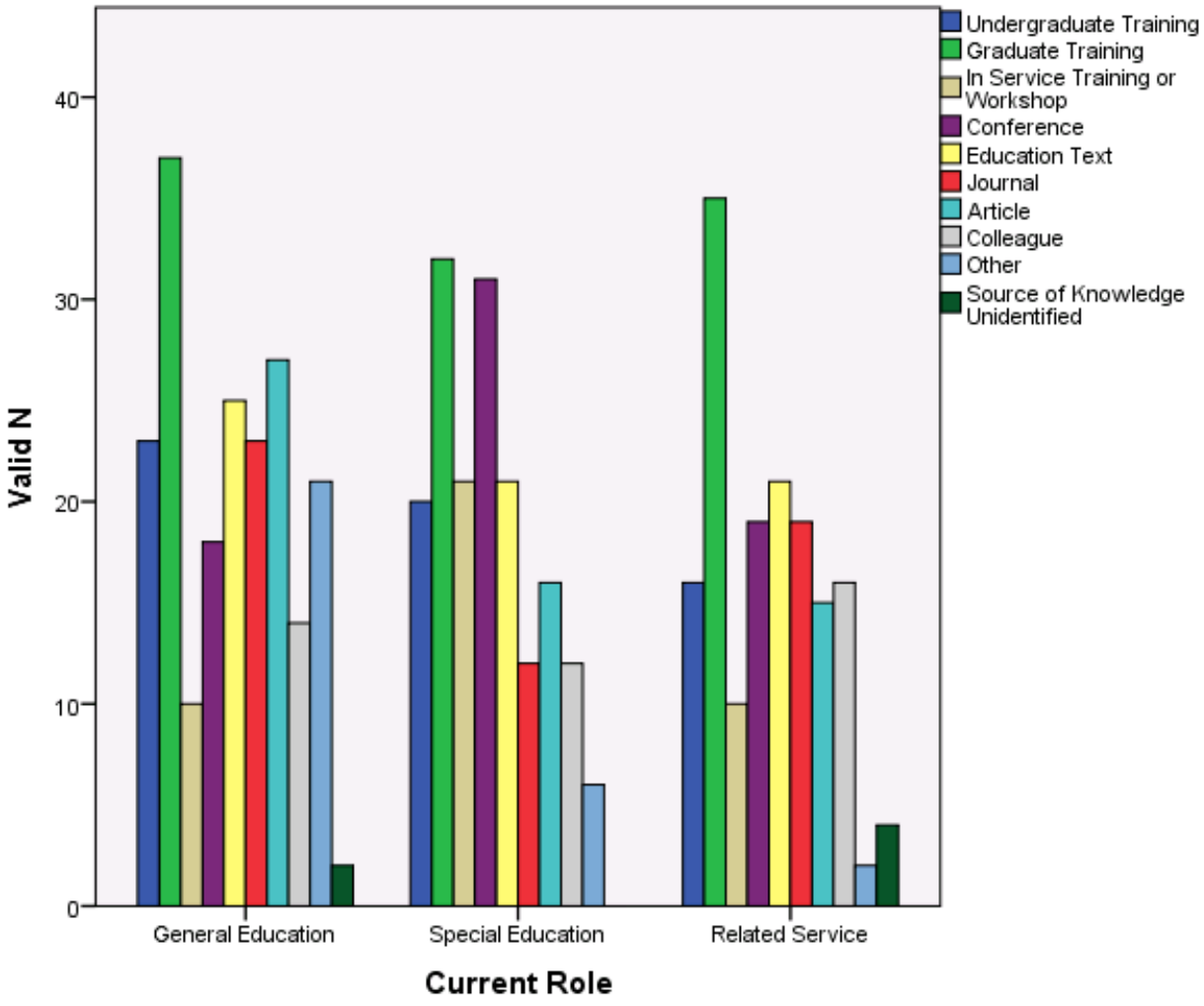

Figure 20. Count of Sources of Knowledge by Current Role

Helpfulness of self-determination. Two questions on the survey asked the educators to rate how helpful they thought teaching self-determination skills would improve students' academic performance and social behaviors in school ($N = 242$) and how helpful they thought teaching self-determination would be to prepare students for future years in secondary education and/or transition to adult goals ($N = 243$). One participant only answered one of the scales, resulting in a small difference in sample sizes for these two variables. Most educators identified that self-determination would be at least somewhat helpful to improve academic performance

and social behaviors (94.6%) and prepare students for post-school life (96.3%). As shown in figures 21 and 22, the rating for the level of helpfulness of teaching self-determination to improve students' academic performance and social behaviors (m = 3.99) was lower that the rating for the level of helpfulness of teaching self-determination to prepare students for future years in secondary education and/or transition to adult goals (m = 4.3), indicating that educators thought instruction in self-determination was more helpful to support students' post-school outcomes than students' current school situation. As exhibited in Figure 23, this was true for all current roles.

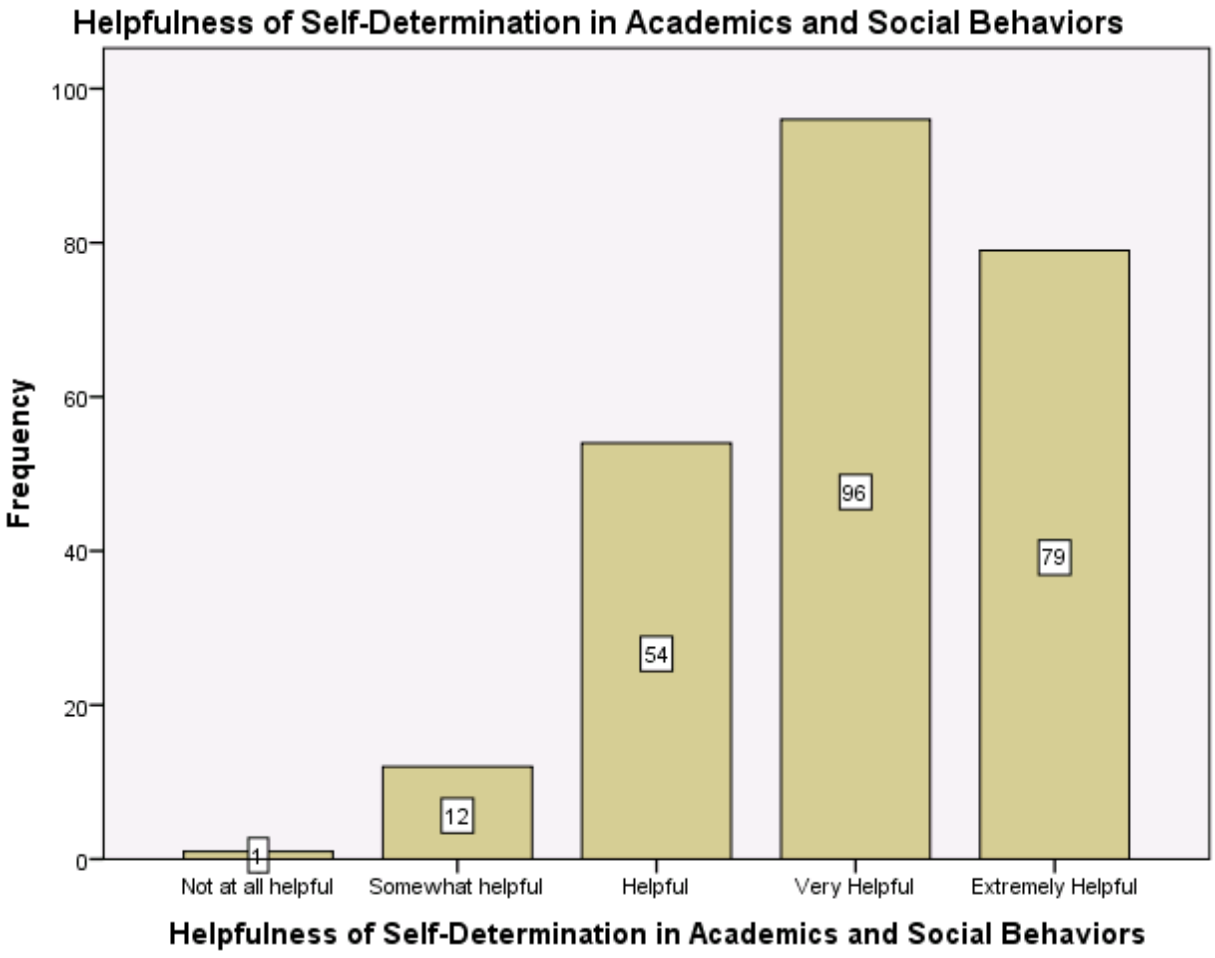

Figure 21. Histogram of Ratings of Helpfulness in Academics and Social Behavior

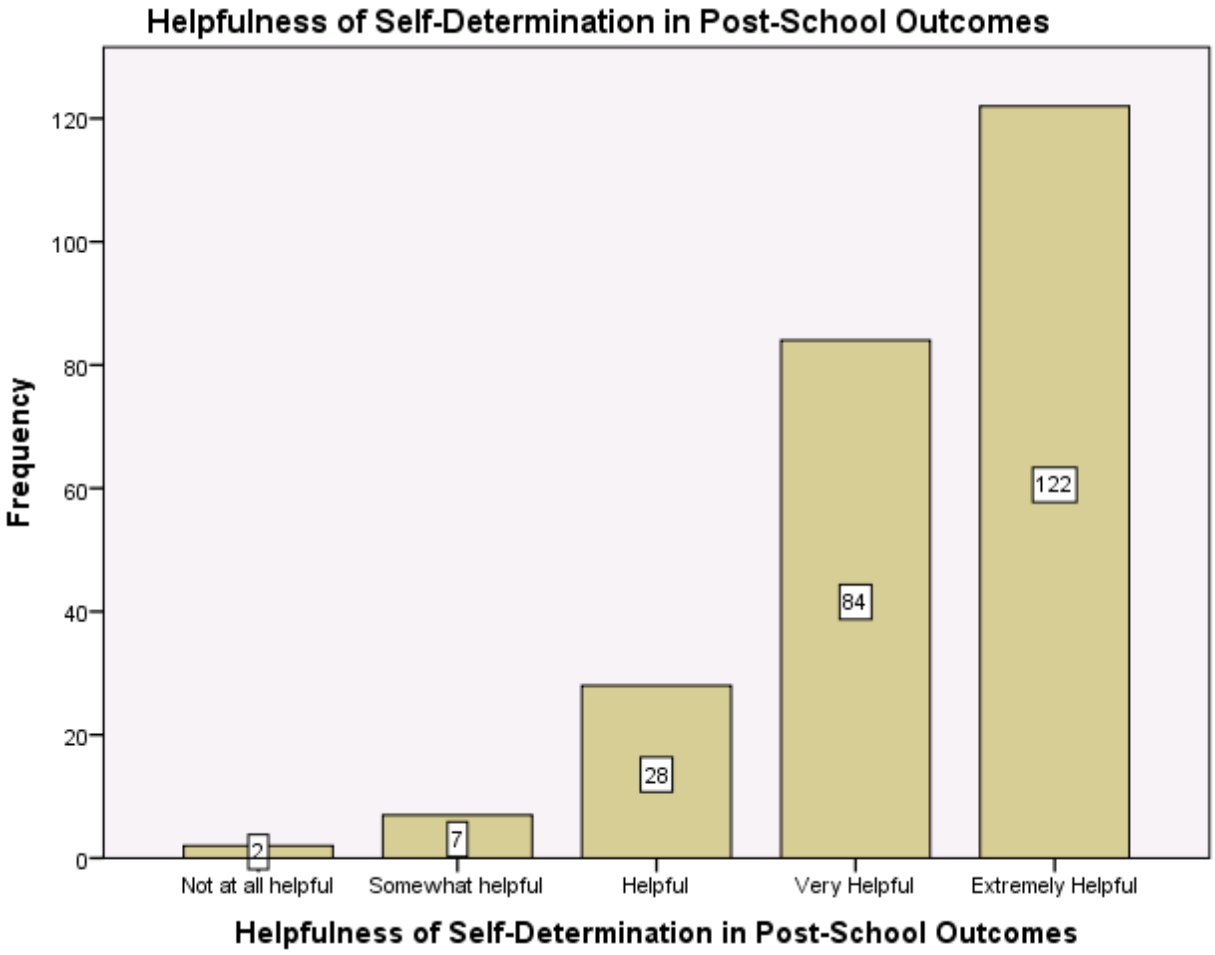

Figure 22. Histogram of Ratings of Helpfulness in Post-School Outcomes

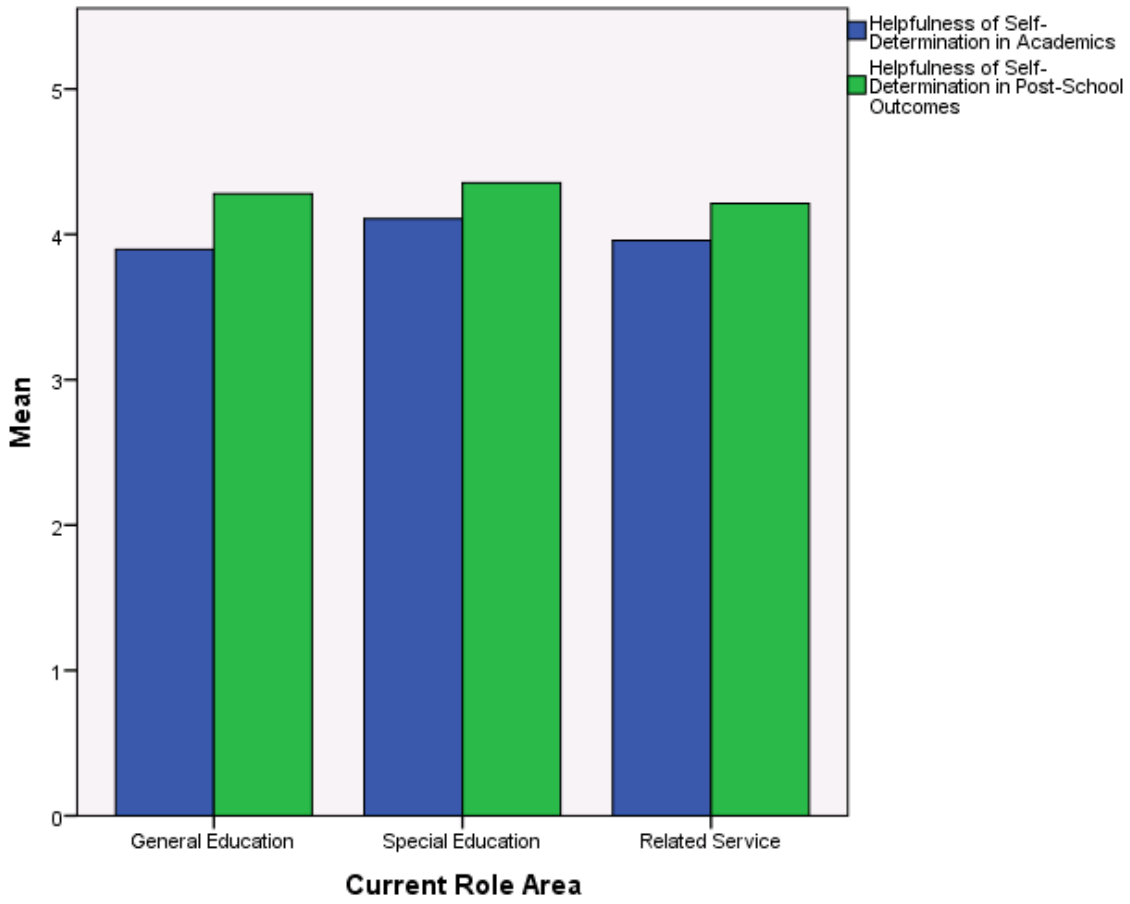

Figure 23. Clustered Bar Graph of Helpfulness of Self-Determination by Current Role

Qualitative Coding

The researcher downloaded the open-ended responses for five research questions to individual spread sheets for analysis. These questions included:

1. In your own words, define self-determination as it refers to an individual's life.
2. Please identify the three most important components of self-determination.
3. In your opinion, is self-determination important? Why or why not?
4. In your opinion, do schools and educators support self-determination for students? Why or why not?
5. In your opinion, what do schools/educators need to provide instruction in self-determination skills?

There was a total of 320 completed responses for the open-ended questions. Participants responded to the open-ended survey questions prior to completing the rating scales of self-reported amount of instruction and ratings of importance of the components of self-determination. The goal of collecting open-ended responses prior to exposing the participants to information about self-determination was to avoid influencing their perspectives. This section includes a description of the coding for each question, overall results for each question, and findings based on current role.

Definition of self-determination. Participants were asked to define self-determination as it refers to an individual's life. All responses were downloaded into an excel spreadsheet with the participant ID number and current role variable. The researcher implemented content analysis using the themes of the essential characteristics and component behaviors of self-determination. "Most content analysis results in a numerical description of features" (Joffe & Yardley, 2004, p. 56). Frequency records of responses that aligned with the essential characteristics and component behaviors of self-determination provided the ability to numerically represent the participants' alignment of their definitions of self-determination to that of the operationalized theoretical definition. Deductive coding, coding themes aligned to the theory of self-determination, was combined with inductive coding techniques to identify emergent themes provided by participants that did not align to the essential characteristics or component behaviors of self-determination (Graneheim, Lindgren, &Lundman, 2017).

Each time a theme was included in a response, it was recorded. The list of themes is presented in this order with essential characteristics of self-determination listed first, followed by the component behaviors. Some responses identified multiple themes. All occurrences were included in the frequency record. Emergent themes were also identified for responses that did

not fit into one of the themes aligned with the operational theory of self-determination. The identified themes and frequency of identification by role are organized in Table 41.

Table 41

Frequency of Responses by Theme and Role Identified in the Definition of Self-Determination

Theme	General Education *n* = 114		Special Education *n* = 79		Related Service *n* = 61		All Educators *N* = 320	
	n	%	*n*	%	*n*	%	*N*	%
Autonomy	3	2.63	3	3.80			9	2.81
Self-Realization	26	22.81	18	22.78	18	29.51	73	22.81
Choice-Making	11	9.65	7	8.86	9	14.75	43	13.44
Decision-Making	6	5.26	17	21.52	4	6.56	33	10.31
Problem-Solving			1	1.27			1	0.31
Goal-Setting & Attainment	29	25.44	24	30.38	13	21.31	80	25.00
Self-Advocacy & Leadership	1	0.88	3	3.80	2	3.28	8	2.5
Self-Awareness & Self-Knowledge	3	2.63	2	3.28	2	3.28	9	2.81
Right	2	1.75	3	3.80	1	1.64	6	1.88
Perseverance	69	60.53	32	40.51	26	42.62	154	48.13
Unclear	1	0.88			1	1.64	4	1.25

Note. All educators (N = 320) includes all roles and additional respondents, i.e., administrators, teaching assistants, and career and technical education teachers.

The theme identified most often was perseverance. Almost 50% of all educators (154/320) identified this theme in their definition of self-determination. General Educators showed a greater proportion of respondents who identified this theme. Goal-setting and Attainment was the theme identified with the second highest frequency, with special educators showing the greatest proportion of respondents who identified this theme.

As described in Chapter 2, the functional theory of self-determination describes four essential characteristics that describe the function of behavior: autonomy, self-regulation, psychological

empowerment, and self-realization (Wehmeyer et al., 2003). Two of these essential characteristics emerged as themes in the educators' definitions of self-determination: autonomy and self-realization.

The survey used in this study measured educators' ratings of seven component skills of self-determination: (a) choice-making, (b) decision-making (c) problem-solving, (d) goal setting, (e) self-advocacy/leadership, (f) self-management, (g) and self-awareness. Six of the seven component behaviors of self-determination were identified in the educators' definitions of self-determination. The only component skill that was not identified was self-management.

Some of the respondents provided definitions of self-determination very similar to the operationalized definition provided by Wehmeyer (1999), "acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life free from undue external influence or interference." One administrator offered the following definition: "Self-determination is the ability (including access) of an individual to make informed choices that have a significant impact on the course of his or her life." Although this respondent offered a very accurate definition of the operationalized definition of self-determination, they also reported a low mean amount of instruction in the components of self-determination ($m = 2.86$), citing that they didn't have sufficient time, latitude, or training in this area. Being an administrator, this participant may not regularly provide instruction.

Two general educators offered similar definitions, "the ability to control their life" and "To take control of one's life as much as fate allows." Responses from special educators included, "Being able to control your own life" and "How a person is in control of their own life and destiny with the choices they make." A related service staff member also offered a very accurate definition, "The ability to control one's own path or future." Although there was not a high proportion of educators who included the component behaviors or essential characteristics

of self-determination in their definition of self-determination, there were some educators who exhibited an understanding of the operationalized definition of self-determination.

Analysis of educators' definitions of self-determination revealed that although some educators identified the essential characteristics and behaviors of self-determination, there was a large proportion of educators who included themes of perseverance. Perseverance was the only theme identified by almost 50% of all educators. All of the essential characteristics and behaviors of self-determination were identified by 25% or lower of all educators.

Important components of self-determination. Educators were asked to identify the three most important components of self-determination. Multiple, manual coding methods were implemented in cycles. All responses for this question were downloaded into an excel spreadsheet with the participant ID number and current role variable.

In the first cycle of coding, literal coding was implemented to categorize each of the important components of self-determination identified by the participants. The researcher reviewed all responses and identified the unique codes for each participant. As codes were identified, they were included as column headers in the excel spreadsheet. These codes were then used for frequency coding of the responses. "All qualitative coding can be coded quantitatively" (Trochim, 2005). If another response included a previously identified code, it was marked under the appropriate column header to record the frequency of responses for each code. Two hundred and twenty-one individual codes were identified during this step.

As part of the first cycle, frequency coding was implemented to quantify educators' number of important components of self-determination identified by current role. A total of 320 participants responded to this question. Most participants answered with three components identified as requested (n = 266); however, some respondents identified more or fewer than three

important components of self-determination requested. A table of the frequency of number of important components identified by current role is reported in Table 42.

Table 42

Frequency of Number of Important Components of Self-Determination Identified

Number of Important Components	General Educator	Special Educator	Related Service	Other	Total
0	1	1	0	0	2
1	2	1	3	2	8
2	7	4	6	8	25
3	96	69	50	51	266
4	7	4	2	3	16
5	1	0	0	0	1
6	0	0	0	2	2
Total	114	79	61	66	320

In the second coding cycle, splicing was used to refine first cycle choices (Joffe & Yardley, 2004). The researcher reviewed the individual codes for common themes and connections. Using a visual approach, the researcher grouped each of the literal codes into themes, continually adjusting these categories as appropriate until all individual codes were included in a category, resulting in 39 themes. A full codebook of these codes and themes is included in Appendix F. These themes were then reviewed for alignment to the essential characteristics and behaviors of self-determination (Wehmeyer, 1995) and analyzed by current role through descriptive analyses in SPSS. Tables 43 and 44 provide summaries of the frequency of each theme and the identification of these themes by current role.

Table 43

Frequency of Identification of Each Theme

Theme	Frequency of Identification
Autonomy	51
Psychological Empowerment	10
Self-Realization	24
Choice-Making	27
Decision-Making	17
Problem-Solving	18
Goal-Setting & Attainment	69
Self-Advocacy & Leadership	30
Self-Management & Self-Regulation	1
Self-Awareness & Self-Knowledge	34
Energy	6
Perseverance	241
Willingness	2
Responsibility	7
Purpose	61
Aspiration	18
Reflection	14
N/A	2
Competence	15
Knowledge	17
Experience	20
Reality	3
Organization	4
Well-Being	9
Struggle	2
Adaptability	10
Mental Health	13
Self-Efficacy	19
Integrity	13
Faith	3
Positive Thinking	15
Curiosity	6
Equity	8
Patience	9
Relatedness	35
Vision	6
Emotional Characteristics	21
Resources	12
Nurture	2
Nature	2

Table 44

Number of Educators Who Identified Each Theme by Role

Theme	General Education *n* = 114		Special Education *n* = 79		Related Service *n* = 61		All Educators *N* = 320	
	N	%	*n*	%	*n*	%	*n*	%
Autonomy	15	13.16	9	11.39	8	13.11	43	13.44
Psychological Empowerment	5	4.39	3	3.80	1	1.64	10	3.13
Self-Realization	24	21.05	16	20.25	20	32.79	73	22.81
Choice-Making	8	7.02	10	12.66	3	4.91	27	8.44
Decision-Making	2	1.75	6	7.59	3	4.91	17	5.31
Problem-Solving	6	5.26	3	3.80	2	3.28	18	5.63
Goal-Setting & Attainment	13	11.40	23	29.11	11	18.03	62	19.38
Self-Advocacy & Leadership	2	1.75	15	18.99	4	6.56	29	9.06
Self-Management & Self-Regulation	1	0.88					1	0.31
Self-Awareness & Self-Knowledge	9	7.89	12	15.19	6	9.84	33	10.31
Energy	2	1.75			3	4.92	6	1.88
Perseverance	70	61.40	42	53.16	33	54.10	178	55.63
Willingness					1	1.64	2	0.63
Responsibility	1	0.88	3	3.80	0		6	1.88
Focus	9	7.89	1	0.27	3	4.91	18	5.63
Purpose	27	23.68	5	6.33	8	13.11	55	17.19
Aspiration	5	4.39	5	6.33	2	3.28	17	5.31
Reflection	7	6.14	2	2.53	4	6.56	14	4.38
N/A					1	1.64	2	0.63
Competence	6	5.26	6	7.59	0		15	4.69
Knowledge	6	5.26	4	5.06	4	6.56	16	5.00
Experience	6	5.26	6	7.59			19	5.94
Reality	2	1.75	1	0.27			3	0.94
Organization	3	2.63			1	1.64	4	1.25
Well-Being	3	2.63	2	2.53	2	3.28	8	2.5
Struggle	1	0.88	1	0.27			2	0.63
Adaptability	7	6.14	1	0.27	1	1.64	10	3.13
Mental Health	2	1.75	5	6.33	3	4.91	13	4.06
Self-Efficacy	6	5.26	4	5.06	3	4.91	18	5.63
Integrity	6	5.26	3	3.80	3	4.91	13	4.06
Faith			2	2.53			3	0.94
Positive Thinking	5	4.39	5	6.33	2	3.28	15	4.69
Curiosity	3	2.63	0		3	4.91	6	1.88
Equity	6	5.26	1	0.27	0		8	2.5
Patience	5	4.39	1	0.27			9	2.81
Relatedness	13	11.40	8	10.13	8	13.11	35	10.94
Vision	2	1.75	1	0.27	1	1.64	6	1.88
Emotional Characteristics	13	11.40	34	43.04	4	6.56	21	6.56
Resources	5	4.39	1	0.27	2	3.28	12	3.75
Nature			1	0.27	1			
Nurture	1	0.88			1		1	0.31

Note. All educators (*N* = 320) includes all roles and additional respondents i.e., administrators, teaching assistants, and career and technical education teachers.

Similar to the educators' definitions of self-determination, "perseverance," was identified with much more frequency than any other theme ($n = 241$). This theme included codes such as "drive," "perseverance," "persistence," and "grit." After perseverance, the most frequently identified themes were goal-setting and attainment ($n = 69$), purpose ($n = 61$), autonomy ($n = 51$), relatedness ($n = 35$), self-awareness and self-knowledge ($n = 34$), and self-advocacy and leadership ($n = 30$). Two educators did not provide any response.

All four essential characteristics of self-determination (autonomy, 13.44%; self-regulation, 0.31%; psychological empowerment, 3.13%; and self-realization, 22.81%) emerged as themes. Approximately 40% (13.44 + 3.13 + 22.81 + 0.31 = 39.69) of all responses included codes in at least one of these essential characteristics. Component skills of self-determination also emerged as themes during the coding analyses.

All seven component skills of self-determination (a) choice-making (8.44%), (b) decision-making (5.31%), (c) problem-solving (5.63%), (d) goal setting (19.38%), (e) self-advocacy/leadership (9.06%), (f) self-management (0.31%), (g) and self-awareness (10.31%) emerged as themes in the educators' responses when they identified the three most important components of self-determination. Over 50% of all educators who participated in the study identified at least one of these component behaviors in their responses (8.44 + 5.31 + 5.63 + 19.38 + 9.06 + 0.31 + 10.31 = 58.45%). For all essential component behaviors of self-determination, except problem-solving, there was a higher proportion of special educators who had identified these behaviors when compared to general educators or related service personnel (Table 43). Special educators also showed a much higher proportion of respondents who included emotional characteristics (43.04%) when compared to general educators (11.40%) and

related service personnel (6.56%). This theme included codes of "creativity," "passion," and "understanding."

Interestingly, additional themes identified by the educators aligned with Deci and Ryan's (2002) theory of self-determination. They described three innate and universal psychological needs of self-determination: (a) the need for competence (i.e., the sense of confidence and efficacy in one's capacities), (b) relatedness (i.e., the sense of belongingness and feeling connected to others and one's community), and (c) autonomy (i.e., the sense of being in control over one's own behavior; Deci & Ryan, 2002). All three of these psychological needs were identified by the educators. Autonomy ($n = 51$) and relatedness ($n = 35$) were two of the most frequently identified themes, with competence ($n = 15$) identified with less frequency.

Overall, educators' responses to their definitions and important components of self-determination provided insight on the educators' existing knowledge of the operationalized essential component behaviors of self-determination prior to being exposed to the description of each component in the rating scales of the survey. Over half of all participants identified at least one component behavior in their response, indicating at least a foundational knowledge of the operationalized theory of self-determination, with special educators exhibiting a higher proportion of respondents who identified the essential component behaviors.

Importance of self-determination. Educators were asked, "In your opinion, is self-determination important? Why or why not?" The vast majority of respondents (314/320) stated that self-determination was important. All responses were downloaded to an excel spreadsheet with the current role variable and participant ID. Frequency coding was used to identify affirmative or negative responses. Many of the responses included words like "vital" or "critical" to describe self-determination. A special educator even described it as the most

important aspect, saying, "It is THE MOST IMPORTANT aspect to one's ultimate success. Even though someone may not be completely cognitively intact or if the odds are stacked against someone, if someone has the want or the drive, they will persevere."

One general educator stated, "self-determination is important because it gives you the right to choose your own path, make your own mistakes, own those mistakes, make your own success and own that success." Another general educator offered a statement very closely aligned to Wehmeyer's (1999) definition of self-determination, stating "yes, self-determination ensures individuals can direct their own lives and is the vehicle by which one's abilities can be effectively utilized, and their challenges overcome."

Two educators stated that self-determination was not important, one educator was unsure, and one respondent only entered punctuation marks in the response box. A related service personnel member attributed the influence of external variables as stronger than self-determination, stating, "Not really. In many lives, there are external obstacles that prevent a person from determining his or her future, that can have a greater impact on a person's future than whether or not they work hard and persevere." If this and other educators believe external factors have stronger influences on an individual's future than self-determination skills, this could translate into less instruction in component behaviors of self-determination as they may not believe they can influence students' levels of self-determination. Although many researchers have identified external factors that interact with an individual's natural tendency towards self-determination (Deci & Ryan, 2002; Wehmeyer, et al., 2003), they also state that practitioners should support positive environmental factors to encourage growth towards self-determination.

A general educator believed that youth do not have the knowledge to be able to make important choices in life, "…it is not as important in terms of educational choices as youth don't

have the wisdom, knowledge or experience to make the most important choices. However, making some choices is a motivating influence." If educators do not believe that youth can make important choices in life, they are less likely to encourage or teach these skills. Although these few educators had negative views of self-determination, most responses were overwhelmingly positive.

School support for self-determination. Educators were also asked, "In your opinion, do schools and educators support self-determination for students? Why or why not?" To analyze this question, the researcher downloaded all responses to this question to an excel sheet with the participant ID number and current role. Frequency coding was used to identify "yes," "no," and "mixed" responses. The researcher then visually reviewed the responses for meaningful quotes and themes.

Less than half of the educators responded with a "yes" (119/320). One educator reflected on the positive impact of implementing instruction in self-determination stating, "Yes, my district has been implementing this as a practice and it seems to have a positive effect." Several respondents who believed self-determination was supported cited opportunities for choice-making as evidence (28/320).

Some of the educators said "no" (69/320), responded with a mixed response (123/320) or provided no response (2/320). Surprisingly, one respondent said, "it is important that we recognize when self-determination can be potentially harmful or unhealthy for the student's development." The mixed responses included statements such as "yes and no," "not as much as they could," "somewhat," or "it varies." Forty of the responses cited that their educational environments were too restrictive to provide instruction in self-determination due to a strong focus on standards/curriculum or lack of support from educators. One educator summarized this

perspective, saying, "Despite best efforts, this does not always happen effectively. At the secondary level, the ability to work with students directly to foster and include their voice and choice is impacted by the time that our teachers have with their students that isn't occupied with content/curriculum demands." Another simply said, "No, it takes too much time and energy to develop."

A theme that emerged from the responses was a tension between supporting students (sometimes too much) and encouraging independence. One special educator described this tension by saying:

> Funny, but I think of this often. First, I feel in Special Education sometimes we over support and misguide self-determination in our students. Leading students to set goals that are unrealistic and cannot be achieved when you look at requirements for that goal. I think we tend to "pass the buck" to make our time easier rather than to assist in finding realistic goals for our students that are challenging and exciting. Second, in Special Education we strive for our students to be as independent as they can…yet we over prompt, overdo, over control. [Punctuation added for clarity.]

Another educator supported this idea, referring to schools as "authoritarian" and failing to support students in exploring their likes or dislikes and strengths or weaknesses. Continuing with their response, they also specifically mentioned students with higher support needs, saying, "They [schools] also sometimes forget that students with significant disabilities have preferences and don't take the time to figure out what they are." Another response cited that teachers may have difficulty relinquishing some control in their classrooms to support self-determination.

In conclusion, although the majority of educators did not think self-determination was fully supported in districts, there were many who did. As one respondent stated, "I believe that a

school can create a culture that supports the development of self-determination." These perspectives may provide valuable directions for supporting instruction in self-determination.

Needs to provide instruction. Educators were asked, "In your opinion, what do schools/educators need to provide instruction in self-determination skills?" All responses to this question were downloaded to a spreadsheet with the respondent ID number and current role. A multicycle coding process was implemented to analyze the data. First, each response was visually reviewed and labeled with a descriptive code. Descriptive coding, "summarizes in a word or short phrase – most often a noun – the basic topic of a passage of qualitative data" (Saldaña, 2016, p. 70). These codes identify the topic of the passage rather than summarize the content (Saldaña, 2016). As the responses to this question were short passages and the purpose was to summarize the needs identified by the educators to provide instruction in self-determination, descriptive coding was an appropriate method. These descriptive codes were then summarized into themes. The codebook for this question is included in Appendix G. A summary of the identified themes and the frequency with which each was identified is listed in Table 45.

Table 45

Needs Identified by Educators for Schools to Provide Instruction in Self-Determination by Theme and Role

Theme	General Education *n* = 114		Special Education *n* = 79		Related Service *n* = 61		All Educators *N* = 320	
	N	%	*N*	%	*n*	%	*n*	%
Change in Policies	15	13.16	10	12.66	2	3.28	36	11.25
Educators' Self-Determination	1	0.88	3	3.80	-	-	5	1.56
Environmental Changes	30	26.32	21	26.58	16	26.23	84	26.25
Increasing Educators' Knowledge & Awareness of Self-Determination	16	14.04	20	25.32	6	9.84	49	15.31
Instruction	67	58.77	49	62.03	37	60.66	194	60.63
Supportive Relationships	20	17.54	9	11.39	9	14.75	51	15.94
Opportunities/Freedom for Choice-making	13	11.40	12	15.19	10	16.39	42	13.13
Can't Teach It	1	0.88	-	-	4	6.56	6	1.88
Unsure or N/A	1	0.88	1	1.27	5	8.20	9	2.81

The theme identified by most educators was instruction. This theme included codes such as teaching self-determination at younger ages, integrated instruction in the skills of self-determination into the curriculum, and direct instruction in the components of self-determination. One theme, "Increasing Educators' Knowledge & Awareness of Self-Determination," consisted of the same individual code. This was the code identified with the highest frequency when compared to all other individual codes. Special educators showed a higher proportion of

respondents in this code and theme when compared to general educators and related service personnel. "Environmental Changes" was the theme identified with the second highest frequency. This theme included codes such as Tools/Resources, More Time, More Staff, Funding, and Change Schedule.

Confirmability Audit

The confirmability audit provides the process for assessing inquiry for reliability and absence of bias (Lincoln & Guba, 1982). There are two goals of the confirmability audit: (a) to review the qualitative research process to be sure they are within the norms of professional practice and (b) to review the findings to ensure that they are substantiated from the data collected. Lincoln and Guba (1982) outline six types of data that should be reviewed as part of the confirmability audit.

Dr. Pauline Goolkasian, Coordinator of the Master of Science in Education in Special Education K-12, Adjunct Professor of Education, and primary doctoral advisor for this dissertation, conducted a confirmability audit using the process recommended by Lincoln and Guba (1982). She reviewed six types of data for reliability and absence of bias.

Raw deidentified data. Dr. Goolkasian reviewed multiple forms of raw, anonymous data including all responses to the open-ended questions from the survey, field contacts to superintendents, sample recruitment, consent forms, and invitation letters.

Data reduction and analysis products. The researcher provided excel data sheets that showed the exact coding, thematic grouping, and frequency coding of all open-response questions. In addition, to these excel sheets, Dr. Goolkasion reviewed the extensive collection of tables used to organize all analysis products including thematic tables, frequency coding, and summaries.

Data reconstruction and synthesis products. Thematic coding in this study was aligned to the essential characteristics and component behaviors of the operationalized definition of self-determination (Wehmeyer, 1999). Dr. Goolkasian has a strong familiarity with self-determination, both in theory and in practice with her extensive experience in general education, special education, and the health care field. She reviewed the coding products, including thematic tables and codes, for alignment to the operationalized theory of self-determination. She and the researcher conducted extensive discussions of the integration of theoretical concepts, relationships, and interpretations based on the existing literature.

Process notes. Dr. Goolkasian monitored all professional contacts and the decision-making process throughout this study. She and the researcher maintained a record of all discussions and reflections throughout this process, both of which were reviewed at the conclusion of data collection for the purposes of this audit. Additionally, a log of all activities, trustworthiness considerations, research design, and rationale for the study were reviewed as part of the audit process. Lastly, chapters three and four of this dissertation provided a detailed log of all research decisions and analyses.

Materials relating to intentions and dispositions. The official proposal for the doctoral program, proposal to the Internal Review Board at Western Connecticut State University, researcher biography, and reflective notes throughout the dissertation advisement process provided the data in this area for Dr. Goolkasian's audit review.

Instrument development information. Dr. Goolkasian reviewed the adapted version of the survey instrument, the pilot survey process, the schedule of survey distribution, survey invitations, consent forms, and the methods of survey distribution. Throughout the formatting of the survey and all edits, Dr. Goolkasian monitored the decision-making process and all feedback

provided from the pilot study. Lastly, she also reviewed the reliability and validity of the instrument prior to inclusion in the study.

Conclusion. The goal of the confirmability audit to is to certify that the qualitative inquiry has been "adequately and fairly executed from a methodological point of view" (Lincoln & Guba, 1982, p. 16). Upon completion of the audit, Dr. Goolkasian confirmed that the researcher had collected the data, implemented professional research methods, and provided a valid and appropriate process for data analysis. These factors lead to the logical conclusions presented in this study.

Results and Comparison of Qualitative and Quantitative Findings

This study implemented a mixed-methods design to gather multiple types of data, expanding the understanding of educators' perspectives and instruction of self-determination. A mixed methods study provides the opportunity for the researcher to achieve the advantages of both types of analysis: summarizing large quantities of data and generalizing based on statistical analyses through quantitative methods and gathering descriptive details of the participants' story through qualitative methods (Trochim, 2005). This section includes a comparison of the qualitative and quantitative findings.

Although over 89% (267/300) of participants indicated that they were familiar with self-determination, a smaller proportion of the participants identified either the essential characteristics (autonomy, 2.81%; self-regulation, 0%; psychological empowerment, 0% and self-realization, 22.81%; Wehmeyer et al., 2003) or the essential behavioral components of self-determination (choice-making, 13.44%; decision-making, 10.31%; problem-solving, 0.3%; goal setting, 25%; self-advocacy/leadership, 2.5%; self-management, 0%; and self-awareness, 2.81%) when prompted to provide a definition of self-determination. When asked to identify the three most important components of self-determination, approximately 40% of all responses included codes in at

least one of these essential characteristics or themes and approximately 50% of all responses included codes in at least one of the essential behavioral components of self-determination.

Interestingly, special educators (68%) showed the highest proportion of participants who identified at least one of the essential behavioral components of self-determination when compared to general educators (44%) or related service personnel (49%) in their definitions of self-determination. Special educators also reported the highest proportion of educators who reported learning about self-determination from a conference or workshop (40%), identified a higher total number of sources of knowledge of self-determination (m = 2.22) when compared to general educators (m = 1.84), and had the highest proportion of educators who identified essential component behaviors of self-determination when prompted to identify the three most important components of self-determination (87%; general educators, 36%; related service. 48%). Special educators may have more knowledge about the behavioral components of self-determination from their participation in professional development workshops on self-determination.

Related service personnel showed the smallest proportion of respondents who identified that they did not have the latitude to provide instruction in self-determination (n = 10, 17.54%) and the smallest proportion of "You haven't had sufficient training or information on teaching in these areas" (n = 8, 14.04%). Related service personnel also reported the highest mean number of sources of knowledge of self-determination (m = 2.75) and showed a higher proportion of educators in almost all categories of sources of knowledge of self-determination. This may have contributed to their significantly higher mean amount of instruction (M = 4.85, SD = .671) than general educators (M = 4.20, SD = .879) and special educators (M = 4.45, SD = .794). Related service personnel may, therefore, provide more instruction in the components of self-determination because they have the latitude and knowledge to do so.

General educators who reported the least amount of instruction also reported the highest mean number of reasons (m = 2.59) why they do not provide instruction in self-determination, including the largest proportion of educators who reported they didn't have the latitude (n = 40, 36.70%) to provide instruction and haven't had sufficient training or information on teaching self-determination (n = 32, 29.36%). One participant selected all seven reasons why they did not provide instruction in self-determination. This participant, a general educator, had a mean rating of importance of the components of self-determination (m = 5.71) which was much higher than their self-reported mean amount of instruction of the components of self-determination (m = 3.29). Similarly, general educators reported the lowest mean number of sources of knowledge of self-determination (m = 1.84). Based on these results, it seems that general educators may have or may perceive more external barriers to providing instruction in self-determination and lack the knowledge and training to do so.

When analyzing the ratings of importance and self-reported amounts of instruction of each of the components of self-determination, problem-solving was rated highest for both ratings of importance and self-reported amount of instruction. Interestingly, although problem-solving had the highest mean rating of importance, there was a very small proportion of educators across all role areas who identified it as an important component of self-determination in the open-response question. Problem-solving was only identified by 5.63% of all participants, much lower than the component of self-awareness and self-knowledge which was identified by 10.31% of all participants. The component of self-awareness and self-knowledge had the lowest mean rating for both levels of importance (m = 4.93) and instruction (m = 4.17). This may indicate that once they were aware that problem-solving was a component of self-determination, educators rated is

as important, but did not have previous knowledge of problem-solving as a component of self-determination.

Educators may not understand or believe that the essential behavioral components of self-determination can be taught. The coding of both the definition of self-determination and the important components of self-determination produced perseverance as the theme most frequently identified by educators. This theme included codes such as "drive," "perseverance," "persistence," and "grit." Grit, defined as "perseverance and passion for long-term goals" was coined by psychologist Angela Ducksworth and colleagues who studied it as a personality trait (Duckworth et al., 2003). The frequency of this code may be due to the recent popularity of Duckworth et al.'s (2003) research which has been featured in Ted Talks, books, and other media outlets. If educators believe that self-determination is an innate drive, they may not understand that it includes component behaviors which can be taught. One general educator summarized this by saying:

> I believe, as teachers, we can motivate students and give them opportunities to be self-determined...but I'm not sure we can teach them to be this way---they either will or they won't, based on what is inside of them. It is like teaching empathy---you can't do it. If one has not gone through something similar, one can only be sympathetic...not empathetic.

Some educators may also report implementing instruction less often because they have more immediate instructional concerns. Almost half of all educators (44.67%) identified that there are other areas in which students need instruction more urgently as a reason they did not provide instruction in self-determination. The ratings of helpfulness of self-determination also

reflected the educators' perspective that self-determination is more helpful for post-school outcomes (m = 4.3) rather than academic or behavior skills in school (m = 3.99).

Chapter Summary

Chapter Four presented qualitative and quantitative data gathered through an adapted version of the survey instrument, Promoting Self-Determination and Student-Directed Learning: Expanded Version (Cho, 2005). Quantitative data analysis was used in Research Questions One, Two, and Three. All three quantitative analyses showed significant results. Research Question Four was analyzed using qualitative data and exploratory analysis.

For Research Question One, a stepwise multiple regression was conducted with the predictor variables of years of experience (1-52), primary assignment (special education or general education), the rating of importance of choice-making (1-6), the rating of importance of decision-making (1-6), the rating of importance of problem-solving (1-6), the rating of importance of goal-setting and attainment (1-6), rating of importance of self-advocacy and leadership (1-6), the rating of importance of self-management and self-regulation (1-6), rating of importance of self-awareness and self-knowledge (1-6), and the criterion variable of total mean self-reported amount of instruction of the components of self-determination (1-6). The variance in the model was predicted solely by three variables: rating of importance of goal-setting and attainment, rating of importance of choice-making, and rating of importance of self-awareness and self-knowledge. Each of the three variables contributed significantly to the model. The total variance of the total mean self-reported amount of instruction explained by the model was 21.4%.

For Research Question Two, Pearson product-moment correlation coefficients and Cohen's (1988) conventions for effect size were conducted to test the relationship between the

ratings of importance and amounts of instruction of the 7 components of self-determination, the mean rating of importance and self-reported amount of instruction, and the sum of number of sources of knowledge of self-determination. Of the 136 correlations, 39 showed strong, positive correlations ($r \geq .50$); 46 showed moderate, positive correlations ($.3 \leq r < .5$); 40 showed weak, positive correlations ($.10 \leq r < .3$); and 11 did not show any significant correlation. All correlations between ratings of importance and self-reported amount of instruction were strong and positive, meaning that, as educators rated the components of self-determination as being more important, they showed a tendency to report higher amounts of instruction of these components.

The only variable of rating of importance that showed a significant relationship with the number of sources of knowledge of self-determination was the rating of importance of choice-making. Educators who had a higher number of sources of knowledge of self-determination significantly reported greater amounts of instruction in choice-making, decision-making, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge, and total mean self-reported amount of instruction, but educators with a higher sum of number of sources of knowledge of self-determination only showed a higher rating of importance of choice-making, not any of the other variables of importance. This indicates relationships between the number of sources of knowledge and instruction, but not most areas of importance.

For Research Question Three, the researcher conducted a multivariate analysis of variance (MANOVA) to test the difference between educators' rating of importance of the components of self-determination and their self-reported amount of instruction of the components of self-determination based on their current role. There was a statistically

significant difference between educators working in general education, special education, and related services on the combined dependent variables. Post-hoc comparisons using the Tukey HSD test indicated that special educators rated the components of self-determination as more important than general educators. Related service personnel provided instruction in the components of self-determination significantly more often than general or special educators.

Research Question Four was used to analyze the responses to five open-response questions and included exploratory analyses of familiarity of self-determination, reasons why educators do not provide instruction in self-determination, sources of knowledge of self-determination, and helpfulness of self-determination. Overall, educators reported that they had familiarity with self-determination and identified that it was important, but less than half of the educators believed that schools and educators support instruction in self-determination. Educators identified a number of reasons why they do not provide instruction in self-determination, with general educators reporting the highest proportion of responses in latitude, time, or knowledge to provide instruction in these areas. As reflected in their definitions and identified important components of self-determination, the theme of perseverance was identified with much more frequency than the essential characteristics or component behaviors of self-determination. Although educators reported that they were familiar with self-determination, overall their definitions of self-determination did not strongly align with the operationalized definition of self-determination that supports instruction.

CHAPTER FIVE: SUMMARY AND CONCLUSIONS

Chapter Five provides a summary of the study, recommendations, and implications of the research. The purpose of this mixed methods study was to understand the factors that influence educators' perspectives and instruction regarding the components of self-determination. This chapter includes a summary of the study and the following four sections for each research question: (a) the research question, (b) results for the question, (c) relation of the research to the existing literature, and (d) suggestions for future research. Chapter Five concludes with program recommendations, limitations of the study, and the conclusion.

Summary of Study

Setting

Participants for this study were certified educators from the Lower Hudson Valley Region of New York State, spanning three counties: Westchester, Rockland, and Putnam. This tricounty region includes a diverse population of school districts, ranging from rural (207 students) to one of the "big 5" city school districts (>25,300 students). This region also includes twenty-seven approved, out of district school placements. These placements consist of public and private schools that provide day or residential programs for students with disabilities whose needs are not met at their local public school. Collectively, the populations in these schools exhibit a range of socioeconomic status and levels of achievement.

Research Design

This research was conducted using a mixed methods survey design to examine educators' self-reported amount of instruction of the components of self-determination, their rating of importance of self-determination skills, and their perceptions about self-determination. Quantitative and qualitative data were collected in parallel, analyzed independently, and

synthesized, implementing a convergent design (Creswell, 2014). Digital survey methodology provided an efficient process for gathering information from a larger number of participants and the ability to "test complex propositions involving several variables in simultaneous interaction" (Babbie, 1990, p. 41). The survey included a demographic questionnaire, ratings scales, checklists, and five open-ended response prompts.

Distribution of the survey included multiple waves and wide distribution. After data cleaning, a sample of 320 respondents was used for analyses. Quantitative analyses included stepwise multiple regression, correlation tables, and a MANOVA. Qualitative analyses included thematic, emergent, and frequency coding. Results of both analyses were compared to enhance the understanding of educators' perspectives and instruction of self-determination.

Research Question One

Research Question

To what degree and in what manner do primary assignment (special education or general education), years of experience, and educators' ratings of importance of each component of self-determination (choice-making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, and self-awareness and self-knowledge) predict educators' total mean self-reported amount of instruction of the components of self-determination?

Research Question One Results

A multi-linear regression using a stepwise procedure was conducted to analyze the variance in the model of the nine predictor variables: (a) primary assignment (special education, 1; general education, 2), (b) years of experience (1-60), and (c-i) educators' ratings of importance of the components self-determination (choice-making, decision-making, problem-

solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge). When the model was run, primary assignment and years of experience did not contribute significantly to the model. The variance in the model, therefore, was predicted by three variables of importance: rating of importance of goal-setting and attainment, rating of importance of choice-making, and rating of importance of self-awareness and self-knowledge. The total variance of the total mean self-reported amount of instruction explained by the model was 21.4%, $F(3, 212) = 19.196$, $p < .000$.

Educators who rated the components of goal-setting and attainment, choice-making, and self-awareness and self-knowledge with higher ratings of importance were more likely to report higher mean amounts of instruction of all components of self-determination. The variables of years of experience in education, primary assignment, rating of importance of decision-making, rating of importance of problem-solving, rating of importance of self-advocacy and leadership skills, and rating of importance of self-management and self-regulation did not have a significant impact on the model.

The non-directional hypothesis for Research Question One, there will be a significant relationship between the predictor variables (primary assignment, years of experience, or educators' ratings of importance of the components of self-determination) and the criterion variable of educators' self-reported amount of instruction for self-determination, was accepted as the variables of ratings of importance of goal-setting and attainment, choice-making, and self-awareness and self-knowledge predicted the total mean self-reported amount of instruction.

Relation of Research Question One to the Literature

Other studies have found positive relationships between the rating of importance of self-determination and the level of instruction (Carter et al., 2008; Cho, 2009). In a study of elementary

teachers' perspectives, Cho (2009) found a relationship between the amount of instruction and the ratings of importance of choice-making, problem-solving, self-advocacy, and self-awareness. Mason, et al. (2004) identified a significant relationship between teachers' ratings of importance and the level of inclusion in self-determined activities at students' annual review meetings. In a study of special educators' perspectives, Thoma et al. (2002) conducted similar correlational analyses and found that teachers' years of experience, disability group taught, and degrees earned did not contribute significantly to educators' amount of instruction. Based on the findings of this study and the related literature, ratings of importance of self-determination predict educators' instruction of self-determination, but primary assignment and experience may not predict the amount of instruction. If more educators believe self-determination to be important, instruction in self-determination and students' skills in this area could be increased.

Suggestions for Future Research

Considering that ratings of importance of the components of self-determination predicted amount of instruction, future research should explore additional factors related to educators' perspectives of the importance of self-determination. This study explored educators' ratings of importance based on current role, but there are likely additional factors which effect their perspectives in this area. Research which compares the effects of different types of professional development on educators' ratings of importance could provide valuable information on how to influence educators' perspectives of the importance of self-determination and, therefore, the amount of instruction of self-determination. This increase in skills could result in improved post-school outcomes for students.

Research Question Two

Research Question

Is there a significant correlation between educators' self-reported amount of instruction of each component of self-determination, their rating of importance of each component of self-determination, and the sum of number of sources of their knowledge on self-determination (Undergraduate Training, Graduate Training, District In-Service Training, Training Conference or Workshop, Education Text, Professional Journal, Article, Colleagues, Other)?

Research Question Two Results

For the second research question, multiple bivariate correlations were calculated for the number of sources of knowledge, the variables of rating of importance of each component of self-determination, the variables of amounts of instruction of each the components of self-determination, the mean rating of importance of all components of self-determination, and the total mean self-reported instruction of all components of self-determination. All correlations between ratings of importance and self-reported amount of instruction were strong and positive, meaning that as educators rated the components of self-determination as being more important, they showed a tendency to report higher amounts of instruction of these components.

The variable of sum of number of sources of knowledge of self-determination had 7 out of 16 significant correlations with the other variables. The only variable of rating of importance that showed a significant relationship with the number of sources of knowledge of self-determination was the rating of importance of choice-making. There were multiple significant correlations between the sum of number of sources of knowledge of self-determination and variables of self-reported amount of instruction. Educators who had a higher sum of number of sources of knowledge of self-determination reported greater amounts of instruction in choice-

making, decision-making, self-advocacy and leadership, self-management and self-regulation, self-awareness and self-knowledge, and total mean self-reported amount of instruction, but educators with a higher sum of number of sources of knowledge of self-determination only showed a higher rating of importance of choice-making, not any of the other variables of importance. This indicates relationships between the number of sources of knowledge and instruction, but only one area of importance.

The non-directional hypothesis for Research Question Two, there will be a significant correlation in educators' self-reported amount of instruction of self-determination, their rating of importance of self-determination skills, and the number of sources of their knowledge of self-determination, was accepted.

Relation of Research Question Two to the Literature

Multiple studies have identified correlations between levels of importance and instruction of the components of self-determination (Carter et al., 2008; Cho, 2009). Cho (2009) also found relationships between the rating of importance and amount of instruction for some of the components of self-determination when elementary educators were surveyed. Cho (2009) found statistically significant, but weak relationships between the level of importance and the corresponding level of instruction in choice-making, self-awareness, self-advocacy, problem solving, and self-management. Carter et al. (2008) found significant, large, positive correlations for importance and instruction of self-determination in all seven components of self-determination.

Other studies had not included sources of knowledge in the correlational analysis with amount of instruction of self-determination, although many researchers have cited a lack of knowledge as a reason why educators do not provide instruction in self-determination (Wehmeyer et al., 2000; Mason et al., 2004). Educators in this study also identified that they

needed to increase their knowledge and awareness of self-determination. This study included the total number of sources of knowledge in self-determination to test this hypothesis, finding that educators were more likely to provide instruction in most of the components of self-determination when they had a greater number of sources of knowledge of self-determination. Much of the recent survey research on self-determination has revealed that although educators believe self-determination is important, they are not teaching these skills to their students (Agran et al., 1999; Agran et al., 2007; Grigal et al., 2003; Wehmeyer et al., 2000). There may not be correlations between educators' number of sources of knowledge of self-determination and ratings of importance because they had already believed self-determination to be important. The correlation between number of sources of knowledge of self-determination and amount of instruction may provide evidence that having more sources of knowledge of self-determination can provide information on how to teach self-determination. If educators had greater access to sources of knowledge of self-determination, they may better understand how to teach self-determination and provide instruction in it more often.

Suggestions for Future Research

Based on the correlation between the total number of sources of knowledge of self-determination and the amount of instruction, future researchers should explore sources of knowledge of self-determination. Possible studies could include examining the standards and curriculum of educator preparation programs for alignment to the essential characteristics and components of self-determination. Additional research could also compare the efficacy of different types of professional development on the amount of instruction of self-determination.

Research Question Three

Research Question

Is there a significant difference between educators' total mean self-reported amount of instruction of the components of self-determination and their total mean rating of importance of the components of self-determination based on their current role (General Education, Special Education, Related Service)?

Research Question Three Results

For the third research question, a MANOVA was used to analyze the data. This analysis was used to test differences between the independent variable of current role area with three levels, general education, special education, and related services, on the measures of two dependent variables: educators' self-reported amount of instruction of the components of self-determination and educators' rating of the importance of the components of self-determination. There was a statistically significant difference between educators working in general education, special education, and related services on the combined dependent variables, F (4, 478) = 6.74, p = .000*;* Wilks' Lambda = .896, partial eta squared = .05.

Post-hoc comparisons using the Tukey HSD test indicated that the mean rating of importance for educators with special education as their current role (M = 5.17, SD = .592) was significantly higher than the mean rating of importance for educators with general education as their current role (M = 4.92, SD = .741), meaning that special educators rated the components of self-determination as more important than general educators. Post-hoc comparisons also indicated that the total mean self-reported amount of instruction for related service personnel (M = 4.85, SD = .671) was significantly higher than both the total mean self-reported amount of instruction for educators with general education as their current role (M = 4.20, SD = .879) and

the total mean self-reported amount of instruction for educators with special education as their current role (M = 4.45, SD = .794), meaning that related service personnel reported providing instruction in the components of self-determination significantly more than general or special educators.

Based on the results of the statistical analyses for Research Question Three, the non-directional hypothesis that there will be a significant difference between educators' total mean self-reported amount of instruction of the components of self-determination and their mean rating of importance of the components of self-determination based on their current role was accepted.

Relation of Research Question Three to the Literature

Much of the research on educators' perspectives of self-determination has been gathered from special educators (Agran et al., 1999; Agran, et al., 2007; Carter et al., 2008; Chow, Wehmeyer, & Kingston, 2013; Thoma et al., 2002; Wehmeyer et al., 2000), but most students with disabilities also receive instruction and support from general educators, related service personnel, and administrators. Previous studies have examined the difference between general educators and special educators. Survey responses from elementary and middle school educators revealed a significant difference in ratings of importance of self-determination between general and special educators, but no difference in instructional time (Stang, et al., 2008). Cho (2009) did not find any statistical difference between elementary general and special educators in reference to the amount of instruction or ratings of importance of the components of self-determination. Carter et al. (2008) found that special educators rated instruction in self-advocacy/leadership skills, and self-awareness/self-knowledge as significantly more important than general educators' ratings. Interestingly, this study also found a difference in the ratings of importance

between general and special educators, but no significant difference in frequency of instruction. Additional analysis in this study revealed that related service personnel reported providing instruction in self-determination more often than general or special educators, an area which had not been included in previous research. If related service personnel were integrated into additional general education or Tier 1 supports, they could have access to more students and effectively provide their greater level of instruction of self-determination to more students.

Suggestions for Future Research

One of the goals of this study was to expand the population of educators that were included in this type of research. Past studies have explored educators' perspectives of self-determination but are limited in generalizability due to low survey response rates and specific population samples (Cho, Wehmeyer, & Kingston, 2013; Wehmeyer, Agran, & Hughes, 2000). This study revealed valuable information about the difference in ratings of importance and amount of instruction based on current role. In addition to general and special educators, this research expanded the population studied by including related service personnel. As this study was conducted in a Northeastern state, additional research would be needed to confirm this finding in other regions of the United States. There were not enough respondents of other roles, such as career and technical education teachers, to include in this study. Future research should continue to expand the diversity of the educators studied to increase the understanding of educators' perspectives of self-determination. Additionally, analyzing a national sample of diverse educators for differences in instruction and importance of self-determination could determine if the significant differences amongst roles found in this study were true in other states and geographic regions.

Research Question Four

Research Question

What are the perceptions of educators on the benefits of self-determination and strategies to achieve it?

Research Question Four Results

Although over 89% (267/300) of participants indicated that they were familiar with self-determination, a much smaller proportion of the participants identified either the essential characteristics (autonomy, self-regulation, psychological empowerment, and self-realization; Wehmeyer et al., 2003) or the essential behavioral components of self-determination (choice-making, decision-making, problem-solving, goal setting, self-advocacy/leadership, self-management, and self-awareness) when prompted to provide a definition of self-determination. When asked to identify the three most important components of self-determination, approximately 40% of all responses included codes in at least one of these essential characteristics and approximately 50% of all responses included codes in at least one of the essential behavioral components of self-determination.

Interestingly, special educators showed the highest proportion of participants who identified at least one of the essential behavioral components of self-determination when compared to general educators or related service personnel in their definitions of self-determination. Special educators also reported the highest proportion of educators who reported learning about self-determination from a conference or workshop and identified a higher total number of sources of knowledge of self-determination when compared to general educators. Although correlational, special educators may have more knowledge about the behavioral components of self-determination from their participation in professional development workshops on self-determination.

Related service personnel showed the smallest proportion of respondents who identified that they did not have the latitude to provide instruction in self-determination (n = 10, 17.54%) and the smallest proportion of "You haven't had sufficient training or information on teaching in these areas" (n = 8, 14.04%). Related service personnel also reported a higher total number of sources of knowledge of self-determination and showed a higher proportion of educators in almost all categories of sources of knowledge of self-determination. This may have contributed to their significantly higher mean amount of instruction (M = 4.85, SD = .671) than general educators (M = 4.20, SD = .879) and special educators (M = 4.45, SD = .794). Related service personnel may, therefore, provide more instruction in the components of self-determination because they have the latitude and knowledge to do so.

General educators who reported the least amount of instruction also reported the highest mean number of reasons (m = 2.59) why they do not provide instruction in self-determination, including the largest proportion of educators who reported they didn't have the latitude (n = 40, 36.70%) to provide instruction and have not had sufficient training or information on teaching self-determination (n = 32, 29.36%). General educators reported the lowest mean number of sources of knowledge of self-determination. Based on these results, it seems that general educators may have or may perceive more external barriers to providing instruction in self-determination and lack the knowledge or training to do so.

When analyzing the ratings of importance and self-reported amounts of instruction of each of the components of self-determination, problem-solving was rated highest for both ratings of importance and self-reported amount of instruction. Interestingly, although problem-solving had the highest mean rating of importance, there was a very small proportion of educators across all role areas who identified it as an important component of self-determination in the open-response question.

Problem-solving was only identified by 5.63% of all participants, much lower than the component of self-awareness and self-knowledge which was identified by 10.31% of all participants. The component of self-awareness and self-knowledge was the lowest rating for both levels of importance and instruction. This may indicate that once they were aware that problem-solving was a component of self-determination, educators rated is as important, but did not have previous knowledge of problem-solving as a component of self-determination.

Educators may not understand or believe that the essential behavioral components of self-determination can be taught. The coding of both the definition of self-determination and the important components of self-determination produced perseverance as the theme most frequently identified by educators. This theme included codes such as "drive," "perseverance," "persistence," and "grit."

Some educators may also report a smaller amount of instruction because they have more immediate instructional concerns. Almost half of all educators (44.67%) identified that there are other areas in which students need instruction more urgently as a reason they did not provide instruction in self-determination. The ratings of helpfulness of self-determination also reflected the educators' perspective that self-determination is more helpful for post-school outcomes rather than academic or behavior skills in school.

Relation of Research Question Four to the Literature

Many of the findings for Research Question Four supported similar survey research on self-determination. This study replicates previous findings that ratings of instruction of self-determination were lower than the ratings of importance (Agran et al., 1999; Agran, Hong, & Blankenship, 2007; Carter et al., 2008; Grigal et al., 2003; Wehmeyer et al., 2000). Similar to Wehmeyer, Agran, and Hughes (2000), Agran et al. (2007), and Carter et al. (2008), the educators

in this study rated problem-solving with the highest rating of importance when compared to the other components of self-determination. Also similar to this study, Carter et al. (2008) and Cho (2009) found that educators reported teaching problem-solving most often.

Interestingly, when compared to other studies, a greater proportion of educators from the Lower Hudson Valley region of New York State reported being familiar with self-determination. In this study, 89% of educators reported familiarity with self-determination while Grigal et al. (2003) found less than 67% of educators reported familiarity with self-determination. Thoma et al. (2002; 75%) and Cho (2002; 72.4%) reported a slightly higher proportion, but it was still lower than this sample and Wehmeyer et al. (2000) reported that 60% of their sample were familiar with self-determination. Reviewing these samples chronologically, it seems that the percentage of educators who report familiarity with self-determination is increasing. The high proportion of educators in this sample who were familiar with self-determination may reflect a trend of growing familiarity with self-determination or a specific regional population of educators who believe they are more familiar with self-determination.

Similar to this study, previous literature has found that educators believe that their training on instructional techniques in self-determination was insufficient. Thoma et al. (2002) found that the majority of teachers reported their instruction in self-determination to be insufficient (67%), Wehmeyer et al. (2000) found 41% of educators identified this variable, Agran et al. (2007) found 34.4% of educators identified this variable, and Cho (2009) found 35.3% of educators identified this variable, while only 25% of this sample reported their own training as a barrier to implementing instruction in self-determination. Similar to familiarity in self-determination, the decrease in percentage of educators who identified that their training in self-determination was insufficient may represent a chronological trend or difference in population.

In this sample, the reasons that educators did not provide instruction in self-determination were similar to those reported by Agran, Hong, and Blankenship (2007). The results from Agran et al. (2007) and this study both found approximately 50% of educators identified that they did not provide instruction in self-determination because, "there are other areas in which students need instruction more urgently." Wehmeyer et al. (2000) found that only 2% of educators identified this variable. The variance in responses could be a result of difference in the date or demographic characteristics of the sample.

This study also replicated Mason et al.'s (2004) findings that most respondents reported dissatisfaction with their district's approach to self-determination. Less than half of the educators in this study believed that schools and educators support instruction in self-determination. Forty of the responses cited that their educational environments were too restrictive to provide instruction in self-determination due to a strong focus on standards-based curriculum or lack of support from other educators. The ability to be self-determined interacts with social, contextual, and environmental factors (Deci & Ryan, 2002; Wehmeyer, et al., 2003). These environmental influences can support or disrupt the natural tendency towards development. This may indicate that the school environment is not supporting educators' own ability to be self-determined about their instructional choices. Five educators directly identified educators' self-determination as a need to provide instruction in self-determination in the open responses.

Both Wehmeyer et al. (2000) and Agran et al. (2007) found that the most frequently cited sources of knowledge of self-determination were professional articles, conferences and workshops, and graduate training. Thoma, et al. (2002) found that approximately one third of teachers identified graduate level courses, followed by journal articles, workshop/conferences, books, undergraduate courses and school district in-service. Cho (2009) identified that teachers

learned about self-determination primarily in graduate training, 26%; followed by conferences and workshops, 23.8%; undergraduate training, 23.1%; professional journal articles, 17.4%; colleagues, 17% and school district in-services, 12.3%. In this study, the sources of knowledge of self-determination identified most frequently were graduate training (41.67%), conference or workshop (28.33%), and education text (29.67%). This study and others show that graduate training and conferences and workshops are important sources of knowledge of self-determination.

Findings from Research Question Four also expanded the current understanding of educators' perspectives of self-determination through the addition of qualitative analysis of educators' definition of self-determination. As reflected in their definitions and identified important components of self-determination, the theme of perseverance was identified with much more frequency than the essential characteristics or component behaviors of self-determination. Researchers have cited a lack of knowledge as a reason why educators do not provide instruction in self-determination (Wehmeyer et al., 2000; Mason et al., 2004). The findings of this study identify that although educators reported that they were familiar with self-determination, their definitions of self-determination did not strongly align with the operationalized definition of self-determination that supports instruction. Without knowledge of the operationalized definition or component behaviors of self-determination, it would be difficult for educators to provide instruction in this area, providing a potential explanation for why the amount of instruction of self-determination is lower than the ratings of importance. If educators had a better understanding of the operationalized definition of self-determination, they may provide instruction more often in these skillsets.

Suggestions for Future Research

Educators' knowledge of self-determination does not align with the operationalized definition of self-determination that supports instruction. This researcher and others found that although many educators identified graduate training as a source of knowledge of self-determination, less than 25% identified undergraduate training as a source of knowledge (Agran et al., 2007; Cho, 2009; Thoma, et al., 2002; Wehmeyer et al., 2000). Considering that most students with disabilities spend the majority of their time in the general education curriculum and self-determination is important for every student, investigating whether or not self-determination is included in undergraduate teacher certification programs would provide valuable insight into sources of knowledge of self-determination for educators. Possible studies could include interviewing students in undergraduate teacher certification programs, surveying professors in teacher preparation programs, or analyzing the curriculum in teacher certification programs for inclusion of self-determination skills. This would provide valuable information about the extent to which self-determination is included in educators' certification programs, potentially identifying bright spots that could be applied to other programs.

Implications of the Study

This researcher identified that although educators believe that self-determination is important, they report a lower amount of instruction. General educators reported the least amount of instruction and the lowest sum of number of sources of knowledge of self-determination. Based on this relationship, the correlation between total number of sources of knowledge and amount of instruction, and the misalignment of educators' definitions of self-determination with the operationalized definition of self-determination, the researcher compared these results with outcomes and proposes that a lack of knowledge is why educators do not

provide instruction in self-determination (Wehmeyer et al., 2000; Mason et al., 2004). Educators in this study also identified this as a need. Although there is a large collection of research that shows self-determination improves academic and post-school outcomes (e.g., Agran, et al., 1999; Berry, et al., 2012; Mazzotti et al., 2016; Shogren et al., 2015; Test et al., 2009; Wehmeyer, 2015; Wehmeyer & Schwartz, 1997) and that instruction in self-determination is effective (e.g., Agran, 1997; Algozzine, Browder, Karvonen, Test, & Wood, 2001; Field et al., 1998; Malian & Nevin, 2002; Serna & Lau-Smith, 1995; Wehmeyer et al., 1998), students are still leaving school unprepared for their adult goals (Benz, Lindstrom, & Yovanoff, 2000; Getzel, 2014; Mithaug et al., 2003; Newman et al., 2011; NCES, 2017; Sanford et al., 2011; Shogren & Ward, 2017; Yin & Shaewitz, 2015; Yin, Shaewitz, & Megra, 2014). Although educators believe that self-determination is important (m = 5.08) and that it will improve post-school outcomes (m = 4.3), their level of instruction in these skills is not ideal (m = 4.40). When asked what educators need to provide instruction in self-determination, the theme identified with the greatest frequency was "instruction" (60.63% of all educators). This theme included statements such as, "start teaching it early," "integrate instruction into the curriculum," "curriculum/lesson plans," "direct instruction," "practice in skills/experiential learning," "modeling," and "differentiation." These results show that educators also self-identify that they need to provide instruction in self-determination more often.

To be provided in the most efficient and effective manner, current recommendations include providing instruction in self-determination within the general education curriculum to best support all students. One strategy that could be implemented immediately is to build on current instruction in self-determination with related service personnel. Many related service personnel such as school counselors, social workers, and school psychologists provide support to

the entire school population on social emotional skills and developmental guidance. In New York state, the new Social Emotional Learning Framework (NYSED, 2018) outlines benchmarks that directly align to self-determination skills:

1. Develop self-awareness and self-management skills essential to success in school and in life.
2. Use social awareness and interpersonal skills to establish and maintain positive relationships.
3. Demonstrate ethical decision-making skills and responsible behaviors in personal, school, and community contexts.

Three component behaviors of self-determination are directly identified in these benchmarks: self-awareness, self-management, and decision-making. Notably, one of the self-determination skills included in these benchmarks, self-awareness, was one of the variables of importance in Research Question One that contributed to the statistical model that predicted mean amount of instruction. The emphasis on these skills alone may support an increased amount of instruction in self-determination. In addition to providing alignment to self-determination skills, the New York State Social Emotional Learning Framework (NYSED, 2018) also outlines measurable, observable behaviors that can be taught, and progress monitored. Most often, related service personnel provide instruction in social emotional skills and, as evidenced in this study, provide instruction in self-determination skills. Supporting the implementation of this framework and providing methods of instruction for both self-determination and social emotional skills may provide the tools necessary to increase every student's self-determination and post-school outcomes within the general education curriculum.

This study also showed a connection between amount of instruction and total number of sources of knowledge of self-determination. When reporting their sources of knowledge of self-determination, few educators reported learning about self-determination in their undergraduate programs. Although graduate programs were identified with the most frequency when compared to other sources of knowledge, they were still identified by less than 50% of educators. All educators must participate in either an undergraduate or graduate certification program. Grigal et al. (2003) surmised that many of the differences between teachers' level of knowledge is a result of varied content in their teacher preparation programs. Certification programs, therefore, are the ideal venue for building educators' self-determination knowledge. Unfortunately, in education, research does not always translate to practice or become integrated into teacher preparation programs. In a letter to the Dean of Mercy College, Robert Pondiscio, a senior fellow at the Thomas B. Fordham Institute, identified this problem in education, stating:

> To earn my degree, I had to demonstrate my "passionate commitment to learning" and show proof that I was a "reflective practitioner"…[T]here's no visible evidence, in my portfolio or in my memory, that suggests any attention to psychology, cognitive science, language development, or the rich body of research in those fields that might shape our views of teaching and learning. (2018)

This statement, from an educator certified in New York state, suggests that the lack of instruction in self-determination may not be unique to self-determination skills, but rather the failure to integrate research-based practices into instruction and teacher preparation programs. This issue in education is greater than the scope of this current study but identifies that knowledge about self-determination and other research-based practices needs to be integrated in teacher

preparation programs. Additional research and outreach to these programs may prove to be an effective pathway for improving students' self-determination skills.

One barrier to the translation of research to practice, including self-determination skills, may be a result of failing to take contextual factors into account. Educators in this study identified several factors that influence educators' ability to provide instruction in self-determination. Almost half of the educators reported that they do not have the time or latitude to provide instruction in self-determination. When asked whether schools support self-determination, 40 of the responses cited that their educational environments were too restrictive to provide instruction in self-determination due to a strong focus on standards-based curriculum or lack of support from educators. Although research has identified multiple curricula that effectively support self-determination skills, they are not being implemented in most schools. Hughes (1997) suggests social validation assessment as a possible solution to the failure to implement research-based practices in education. Social validation assessment includes soliciting feedback from practitioners on the feasibility of proposed programs and incorporating this input into program planning, implementation, and evaluation (Hughes, 1997). An instructional method for self-determination that effectively integrates into the general education curriculum and Next Generation Learning Standards (NYSED, 2017) could be identified through social validation assessment. Konrad, Walker, Fowler, Test, and Wood (2008) proposed a crosswalk in which teachers can identify target areas for embedding self-determination instruction and support. Eliciting feedback from educators on such strategies could provide the information necessary to create an instructional program on self-determination that is not only research-based, but practitioner-validated by the educators who need to implement it.

Limitations of the Study

Quantitative Limitations

Possible limitations of this study were lack of randomization, inability to manipulate the independent variable, and differential selection. Lack of randomization and inability to manipulate the independent variable are two weaknesses of correlational research. The topic of the proposed study necessitated a correlational design, for Research Questions One and Two, and a causal comparative design for Research Question Three as it would be impossible and unethical to manipulate the independent variables of primary assignment, years of experience, or current role. Although these limitations are substantial, they are unavoidable and inherent in survey research. Results should be interpreted with caution with these threats taken into consideration.

Differential selection is a high threat as the primary sampling procedure is focused on canvasing local superintendents. The target population was educators in the Lower Hudson Valley region of New York State working full-time in a school. Some superintendents did not agree to participate in the study due to scheduling constraints, competing initiatives, and concerns about the rating of instructional components in their school district. Superintendents were offered an aggregated summary of the responses to encourage distribution. Information on anonymity and potential benefits of the research were also included to encourage participation. Additionally, the sampling procedure included distribution of the survey to local, online forums, and direct distribution lists. Distributing the survey directly to educators increased access to the population during the second wave of distribution.

Threats to Survey Research

Due to the nature of survey research, additional threats to validity should be considered. Ponto (2015) and Dillman et al. (2014) outlined four sources of error in survey research: (a)

coverage error, (b) sampling error, (c) measurement error, (d) and nonresponse error. This study was designed to address each of these sources of error.

Coverage error. Coverage error is the chance that some individuals in the population are not included in the sample. Multimode design was implemented to address this error. The survey was provided in both online and print formats to increase the probability of a representative sample. Additionally, the survey was widely distributed to reach as much of the population as possible.

Sampling error. Sampling error occurs when individuals in the sample do not represent the characteristics of the population (Ponto, 2015). Ponto (2015) recommends three techniques to address this source of error: (a) a clearly defined population, (b) diverse recruitment strategies, (c) and large sample. The population for this study was defined as certified educators in the Lower Hudson Valley region of New York state. Diverse recruitment strategies included wide distribution of the survey through multiple venues including direct contact with permission from individual school administration, local and online education communities, and distribution lists that cover the tri-county region. These distribution methods resulted in a moderately large sample ($N = 320$).

Measurement error: Measurement error occurs when the survey instrument does not accurately reflect the topic of study (Ponto, 2015). This source of error has been addressed through the identification of a reliable instrument, based on established theoretical constructs. Additional pilot studies ensured that the survey was user-friendly.

Nonresponse error. Nonresponse error occurs when there are differences between responders and non-responders. This error has a much higher potentiality of validity threat with a low response rate (Dillman et al., 2014). This source of error has been addressed through the

identification of a reliable instrument, based on established theoretical constructs, a small incentive to encourage participation, and intentional efforts to gather a large sample.

Trustworthiness

The trustworthiness of this study included consideration of credibility, confirmability, dependability, and transferability (Lincoln & Guba, 1982).

Credibility. Credibility is how well do the research design, informants, and context support accurate findings (Lincoln & Guba, 1982). The researcher implemented established research methods for gathering educators' perspectives and levels of implementation of self-determination. A confirmability audit was conducted to establish that the qualitative research process was within the norms of professional practice and to ensure that they are substantiated from the data collected.

Neutrality. Neutrality is the believability of the results (Lincoln & Guba, 1982). The researcher confirmed neutrality by relying on established research methods and operationalized coding of self-determination when interpreting results. A thorough description of the logic and methods used in this study ensured transparency of choices.

Dependability. Dependability is how well the research methods or instruments provide reliable measures over time (Lincoln & Guba, 1982). Open-ended qualitative inquiry questions were submitted to a pilot review committee to ensure that the questions were clear and written as accurately as possible to capture educator's opinions.

Applicability. Applicability is the extent to which the findings of the study can be applied to the population (Lincoln & Guba, 1982). A thick description of the study provided the context necessary for future researchers to assess the transferability of any potential findings.

Conclusion

This study sought to understand educators' perspectives and amount of instruction of self-determination. Many of the findings in this study replicated previous research, including educators' belief of self-determination to be important and that the amount of instruction is not ideal. This study built on the previous research by adding analysis of educators' perspective from a diverse sample, comparing the amount of instruction and ratings of importance amongst additional roles, and gathering qualitative data on educators' perspectives and definitions. Although a review of findings over time hint to a possible trend in an increase in the amount of instruction and knowledge of self-determination, there is still an opportunity to increase instruction in this important skill and improve the outcomes of every student. Identifying practitioner-validated strategies, partnering with teacher preparation programs, and integrating self-determination into national and statewide initiatives are possible pathways to achieve this goal.

References

Abery, B., Rudrud, L., Arndt, K., Schauden, L., & Eggebeen, A. (1995). Evaluating a multicomponent program for enhancing the self-determination of youth with disabilities. *Intervention in School and Clinic, 30*(3), 170-179.

ADA National Network (n.d.). What is the Americans with Disabilities Act (ADA)? Retrieved from https://adata.org/learn-about-ada

Agran, M. (1997). *Student-directed learning: Teaching self-determination skills.* Pacific Grove, CA: Brooks/Cole.

Agran, M., Blanchard, C., & Wehmeyer, M. L. (2000). Promoting transition goals and self-determination through self-directed learning: The Self-Determined Learning Model of Instruction. *Education and Training in Mental Retardation and Developmental Disabilities, 35,* 351-364.

Agran, M., Blanchard, C., Wehmeyer, M., & Hughes, C. (2001). Teaching students to self-regulate their behavior: The differential effects of student-vs. teacher-delivered reinforcement. *Research in Developmental Disabilities, 22*(4), 319-332.

Agran, M., Blanchard, C., Wehmeyer, M., & Hughes, C. (2002). Increasing the problem-solving skills of students with developmental disabilities participating in general education. *Remedial and Special Education, 23*, 279–288.

Agran, M., Cavin, M., Wehmeyer, M., & Palmer, S. (2006). Participation of students with moderate to severe disabilities in the general curriculum: The effects of the self-determined learning model of instruction. *Research & Practice for Persons with Severe Disabilities, 31,* 230 -241.

Agran, M., Hong, S., & Blankenship, K. (2007). Promoting the self-determination of students with visual impairments: Reducing the gap between knowledge and practice. *Journal of Visual Impairment & Blindness, 101*, 453-464.

Agran, M., Snow, K., & Swaner, J. (1999). Teacher perceptions of self- determination: Benefits, characteristics, strategies. *Education and Training in Mental Retardation and Developmental Disabilities, 34,* 293-301.

Agran, M., & Wehmeyer, M. L. (2000). Promoting transition goals and self-determination through student self-directed learning: The self-determined learning model of instruction. *Education and Training in Mental Retardation and Developmental Disabilities, 35*(4), 351-364.

Agran, M., Wehmeyer, M. L., Cavin, M., & Palmer, S. (2008). Promoting student active classroom participation skills through instruction to promote self-regulated learning and self-determination. *Career Development for Exceptional Individuals*, *31*, 106-114.

Algozzine, B., Browder, D., Karvonen, M., Test, D. W., & Wood, W. M. (2001). Effects of interventions to promote self-determination for individuals with disabilities. *Review of Educational Research*, *71,* 219-277.

Allison, P. D. (2001). *Missing data* (Vol. 136). Sage Publications.

Americans with Disabilities Act of 1990 (ADA) (1990). [Original text prior to 2008 amendments]. Retrieved from http://www.ada.gov/archive/adastat91.htm#Anchor-Sec-49575.

American Psychological Association. [Feb. 8, 2012] Increasing student success through instruction in self-determination. Accessed from https://www.apa.org/research/action/success

Americans With Disabilities Act of 1990, Pub. L. No. 101-336, 28 C.F.R. § 35.130(d), 104 Stat. 328 (1990).

Babbie, E. R. (1990). *Survey Research Methods.* Belmont, CA: Wadsworth Publishing. Company.

Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. Freeman, New York: MacMillan.

Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes for students with disabilities: Predictive factors and student perspectives. *Exceptional Children*, *66*(4), 509-529.

Berry, H. G., Ward, M., & Caplan, L. (2012). Self-determination and access to postsecondary education in transitioning youths receiving supplemental security income benefits. *Career Development and Transition for Exceptional Individuals, 35, 68-75.*

Carter, E. W., Lane, K. L., Pierson, M. R., & Stang, K. K. (2008). Promoting self-determination for transition-age youth: Views of high school general and special educators. *Council for Exceptional Children*, *75*(1), 55-70.

Chambers, C. R., Wehmeyer, M. L., Saito, Y., Lida, K. M., Lee, Y., & Singh, V. (2007). Self-determination: What do we know? Where do we go? *Exceptionality, 15*, 3-15.

Chao, P-C., & Chon, Y-C. (2017). Correlation and predictive relationship between self-determination instruction and academic performance of students with disabilities. *Universal Journal of Educational Research 5*(5), 799-805.

Cho, H-J. (2005). Promoting Self-Determination and Student-Directed Learning: Expanded Version.

Cho, H-J. (2009). Self-determination and elementary education: Elementary school teachers' knowledge of and use of interventions to promote the self-determination of students. University of Kansas, ProQuest Dissertations Publishing, 2009. 3372404.

Cho, H-J., Wehmeyer, M. L., & Kingston, N. (2013). Factors that predict elementary educators' perceptions and practice in teaching self-determination. *Psychology in the Schools, 50*(8), 770-780.

Clark, G., & Patton, J. R. (1998). *Transition Planning Inventory*. Austin, TX: PRO-ED.

Clarke, M. (2008), Understanding and managing employability in changing career contexts, *Journal of European Industrial Training*, *32*(4), 258-284.

Cobb, B., Lehmann, J. P., Newman-Gonchar, R., & Alwell, M. (2009). Self-determination for students with disabilities: A narrative metasynthesis. *Career Development for Exceptional Individuals, 32*(2).

Cohen J. (1988). Statistical Power Analysis for the Behavioral Sciences. New York, NY: Routledge Academic

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Cook, J. A., Peterson, C., & Jonikas, J. A. (2004). *Express yourself: Assessing self-determination in your life.* Chicago, IL: University of Illinois at Chicago, National Research and Training Center on Psychiatric Disability.

Copeland, S. R., Hughes, C., Agran, M., Wehmeyer, M. L., & Fowler, S. E., (2002). An intervention package to support high school students with mental retardation in general education classrooms. *American Journal on Mental Retardation, 107*(1), 32-45.

Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches.* 4th ed. Thousand Oaks, California: SAGE Publications.

Dattilo, J., & Rusch, F. (2012). Teaching problem solving to promote self-determined leisure engagement. *Therapeutic Recreation Journal, 46*(2), 91–105.

Day, J. C., & Newburger, E. C. (2002). *The big payoff: Educational attainment and synthetic estimates of work-life earnings*. (Current Population Report P23–210). Washington, DC: U.S. Census Bureau.

Deci, E. L. (1975). Intrinsic motivation. New York, NY, US: Plenum Press.

Deci, E. L., & Ryan R. (1985) Intrinsic Motivation. New York: Plenum Press.

Deci, E. L., & Ryan, R. M. (Eds.). (2002). *Handbook of self-determination research*. Rochester, NY: Univ. of Rochester Press.

Denney, S. C., & Daviso, A.W. (2012). Self-Determination: A critical component of education. *American Secondary Education, 40*(2).

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: the tailored design method*. John Wiley & Sons.

Ducksworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, *92*(6), 1087-1101.

Eagan, M. K., Stolzenberg, E.B., Zimmerman, H.B., Aragon, M.C., Whang Sayson, H., & Rios-Aguilar, C. (2017). The American freshman: National norms fall 2016. Los Angeles: Higher Education Research Institute, UCLA.

Field, S., & Hoffman, A. (1996). *Steps to self-determination*. Austin, TX: PRO-ED.

Field, S., & Hoffman, A. (2002). Lessons learned from implementing the Steps to Self-Determination Curriculum. *Remedial and Special Education, 23*(2).

Field, S., Martin, J., Miller, R., Ward, M., & Wehmeyer, M. (1998). A practical guide to teaching self-determination. Reston, VA: Council for Exceptional Children.

Fornes, S. Rocco, T., & Rosenberg, H. (2008). Improving outcomes for workers with mental retardation. *Human Resource Development Quarterly, 19*(4), 281-298.

Fowler, C. H., Konrad, M., Walker, A. R., Test, D. W., & Wood, W. M. (2007). Self-determination interventions' effects on the academic performance of students with developmental disabilities. *Education and Training in Developmental Disabilities, 42*(3), 270-285.

Fullerton, A. (1992). The self-determination descriptors scale. Portland, OR: Portland State University.

Fullerton, A. (1994). *Putting feet on my dreams: A program in self-determination for adolescents and young adults.* Portland, OR: Portland State University.

Gage, N. A., Lierheimer, K. S., & Goran, L. G. (2012). Characteristics of students with high-incidence disabilities broadly defined. *Journal of Disability Policy Studies*, *23*(3), 168-178.

Gall, M. D., Gall, J P., & Borg, W. R. (2007). *Educational research: An introduction* (7th ed.). New York: Allyn & Bacon.

George, D., & Mallery, P. (2010) SPSS for Windows Step by Step: A Simple Guide and Reference 17.0 Update. Boston: Pearson.

Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alternative patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.

Getzel, E. E. (2014). Fostering self-determination in higher education: Identifying evidence-based practices. *Journal of Postsecondary Education and Disability, 27*(4), 381-386.

Ginsburg, R. B., & Supreme Court of The United States. (1998) *U.S. Reports: Olmstead v. L.C., 527 U.S. 581*. [Periodical] Retrieved from the Library of Congress. https://www.loc.gov/item/usrep527581/

Graneheim, U., Lindgren, B., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today, 56*, 29-34.

Grigal, M., Neubert, D. A., Moon, M. S., & Graham, S. (2003). Self-determination for students with disabilities: Views of parents and teachers. *Exceptional Children*, *70*(1), 97-112.

Guba, E. (1981). Criteria for Assessing the Trustworthiness of Naturalistic Inquiries. *Educational Technology Research and Development, 29*(2), 75-91.

Hair Jr. J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate Data Analysis (5th ed.). Upper Saddle River, NJ: Prentice Hall.

Hair Jr., J. F., Sarstedt, M., Hopkins, L. & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM), *European Business Review*, *26*(2), 106-121.

Halloran, W. D. (1993). Transition services requirement: Issues, implications, challenge. In R. C. Eaves & P. J. McLaughlin (Eds.), Recent advances in special education and rehabilitation (pp. 210-224). Boston: Andover.

Halloran, W., & Simon, M. (1995). The transition services requirement: A federal perspective on issues, implications, and challenges. *Journal of Vocational Special Needs Education, 17,* 94-97.

Halpern, A. S., Herr, C. M., & Doren, B. & Wolf, N. H. (2000). *NEXT STEP Student Transition and Educational Planning (2nd ed.). Austin: PRO-ED*.

Halpern, A. S., Yovanoff, P., Doren, B., & Benz, M. R. (1995) Predicting participation in postsecondary education for school leavers with disabilities. *Exceptional Children*, *62*, 151-164.

Hoffman, A., & Field, S. (1995). Promoting self-determination through effective curriculum development. *Intervention in School and Clinic*, *30*(3), 134-141.

Hoffman, A., & Field, S. (2005). *Steps to Self-Determination.* Austin, TX: ProEd.

Hoffman, A., Field, S., & Sawilowsky, S. (1995). *Self-Determination Observation Checklist.* Detroit, MI: Wayne State University.

Hoffman, A., Field, S., & Sawilowsky, S. (1996a). *Self-determination assessment battery.* Detroit, MI: Wayne State University.

Hoffman, A., Field, S., & Sawilowsky, S. (1996b). *Self-determination knowledge scale.* Austin, TX: PRO-ED.

Hughes, C., Kim, J-H., Hwang, B., Killian, D. J., Fischer, G. M., Brock, M. L., Godshall, J. C., & Houser, B. (2019). Practitioner-validated secondary transition support strategies. *Education and Training in Mental Retardation and Developmental Disabilities, 32*(3), 201-212.

Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004).

Irvine, A. B., Erickson, A. M., Singer, G. H., & Stahlberg, D. (1992). A coordinated program to transfer self-management skills from school to home. *Education and Training in Mental Retardation, 28*, 241–254.

Izzo, M. V., Hertzfeld, J. E., Aaron, J. H. (2001). Raising the bar: Student self-determination + good teaching = success. *Journal for Vocational Special Needs Education, 24*(1).

Izzo, M., & Lamb, M. (2002). Self-determination and career development: Skills for successful transitions to postsecondary education and employment. A white paper for the Post-School Outcomes Network of the National Center on Secondary Education and Transition (NCSET) at the University of Hawaii at Manoa. Retrieved from: http://www.ncset.hawaii.edu/publications/pdf/self_determination.pdf

Joffe, H., & Yardley, L. (2004). Content and thematic analysis. *Research methods for clinical and health psychology*, *56*.

Kelly, J. R., & Shogren, K. A. (2014). The impact of teaching self-determination skills on the on-task and off-task behaviors of students with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders, 22,* 27-40.

Konrad, M., Walker, A. R., Fowler, C. H., Test, D. W, & Wood, W. M. (2008). A model for aligning self-determination and general curriculum standards. *TEACHING Exceptional Children*, *40*(3), 53-64.

Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, *45*, 214-222.

Lachapelle, Y., Wehmeyer, M. L., Haelewyck, M. C., Courbois, Y., Keith, K. D., Schalock, R., Verdugo, M. A., & Walsh, P. N. (2005). The relationship between quality of life and self-

determination: an international study. *Journal of Intellectual Disability Research, 49*, 740-744.

Lane, K. L., Carter, E. W., Pierson, M. R., & Glaeser, B. C. (2006). Academic, Social, and Behavioral Characteristics of High School Students with Emotional Disturbances or Learning Disabilities. *Journal of Emotional and Behavioral Disorders, 14*(2), 108-117.

Lee, S., Wehmeyer, M. L, Palmer, S. B., Soukup, J. H., Little, T. D. (2008). Self-Determination and access to the general education curriculum. *The Journal of Special Education, 42*(2), 91-107.

Levin, B. (2014). The development of teachers' beliefs. In H. Fives & M.G. Gill (eds.), *International handbook of research on teachers' beliefs* (pp. 48-65). New York, NY: Routledge.

Levitt, K. E. (2001). An analysis of elementary teachers' beliefs regarding the teaching and learning of science. *Science Education, 86*, 1-22.

Lincoln, Y., & Guba, E. (1982). Establishing dependability and confirmability in naturalistic inquiry through an audit. Paper presented at the Annual Meeting of the American Educational Research Association. New York, NY.

Malian, I., & Nevin, A. (2002). A review of self-determination literature: Implications for practitioners. *Remedial and Special Education*. *23*(2), 68-74.

Martin, J. E. and Marshall, L. H. (2016). ChoiceMaker Self-Determination Assessment. Longmont, CO: Sopris West.

Martin, J. E., Marshall, L. H., & Maxson, L. L. (1993). Transition policy: Infusing self-determination and self-advocacy into transition programs. *Career Development for Exceptional Individuals*, *16*, 53-61.

Martin, J. E., Marshall, L. H., & Maxson, L. L. (1994). *Choicemaker self-determination transition assessment and curriculum,* Colorado Springs, CO: University of Colorado at Colorado Springs, Center for Educational Research.

Martin, J. E., Mithaug, D. E., Cox, P., Peterson, L. Y., Van Dycke, J. I., & Cash, M. F. (2003). Increasing self-determination: Teaching students to plan, work, evaluate, and adjust. *Exceptional Children, 69*, 431-447.

Martin, L. A., Morehart, L. M., Lauzon, G. P., & Daviso, A. W. (2013). Teachers' views of student's self-determination and citizenship skills. *American Secondary Education, 41*(2).

Martorell, A., Gutierrez-Recacha, P., Pereda, A., & Ayuso-Mateos, J. L. (2008). Identification of personal factors that determine work outcome for adults with intellectual disabilities. *Journal of Intellectual Disability Research, 52,* 1091-1101.

Mason, C., Field, S., & Sawilowsky, S. (2004). Implementation of self-determination activities and student participation in IEPs. *Exceptional Children, 70*(4), 441-451.

Mazzotti, V. L., Rowe, D. A., Sinclair, J., Poppen, M., Woods, W. E., & Shearer, M. L. (2016). Predictors of post-school success: A systematic review of NLTS2 secondary analyses. *Career Development and Transition for Exceptional Individuals, 39*, 195-215.

McGlashing-Johnson, J., Agran, M., Sitlington, P., Cavin, M., & Wehmeyer, M. (2003). Enhancing the job performance of youth with moderate to severe cognitive disabilities using the self-determined learning model of instruction. *Research and Practice for Persons with Severe Disabilities*, *28*, 194-204.

Meyers, L. S., Gamst, G., & Guarino, A. J. (2016). *Applied multivariate research: Design and interpretation*. Sage Publications.

Miles, M. B., Huberman, A. M., & Saldañ̃a, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook.* Thousand Oaks, CA: Sage Publications, Inc.

Miller, R. J., Lombard, R. C., & Corbey, S. A. (2007) *Transition Assessment: Planning Transition and IEP Development for Youth with Mild Disabilities,* Boston, MA: Pearson Education.

Mithaug, D. E., Campeau, P.L., & Wolman, J.M. (2003). Assessing self-determination prospects among students with and without disabilities. In D. E. Mithaug , D. K. Mithaug, M. Agran, J. E. Martin, & M. L. Wehmeyer (Eds.), *Self-Determined Learning Theory: Construction, Verification, and Evaluation* (pp. 61–76). Mahwah, NJ: Lawrence Erlbaum.

Muijs, D. (2011). *Doing quantitative research in education with SPSS*. Los Angeles, CA: Sage Publications.

National Center for Education Statistics, U.S. Department of Education, (2019). Percentage distribution of students 6 to 21 years old served under Individuals with Disabilities Education Act (IDEA), Part B, by educational environment and type of disability: Fall 2015. *In Digest of Education Statistics* (chap. 1)*,* Retrieved February 9, 2020, from the National Center for Education https://nces.ed.gov/fastfacts/display.asp?id=59

National Center for Education Statistics, U.S. Department of Education. (2017). Table 204.60: Percentage distribution of students 6 to 21 years old served under Individuals with Disabilities Education Act (IDEA). Part B. by educational environment and type of disability: Selected years, fall 1989 through fall 2015. In *Digest of Education Statistics 2017* (chap. 2). Retrieved March 23, 2019, from the National Center for Education https://nces.ed.gov/programs/digest/current_tables.asp

National Center for Education Statistics, U.S. Department of Education. (2017b). Table 1. Public high school 4-year adjusted cohort graduation rate (ACGR), by race/ethnicity and selected demographic characteristics for the United States, the 50 states, and the District of Columbia: School year 2015–16. In Data Tables. Retrieved March 24, 2019, from the National Center for Education https://nces.ed.gov/ccd/data_tables.asp#Page:1

National Council on Disability (1989, September). The education of students with disabilities: Where do we stand? Washington, DC: Author. Retrieved from https://ncd.gov/publications/1989/September1989

National Education Association of the United States., & United States. (1978). *P.L. 94-142: Related Federal Legislation for Handicapped Children and Implications for Coordination*. Washington: The Association.

National Technical Assistance Center on Transition (2016). Using the Self-Determined Learning Model of Instruction to Teach Goal Attainment.

Naumann, D. G. (2017). Self-Determination and Positive Post School Outcomes for Transition Age Youth. *Culminating Projects in Special Education, 39*. Retrieved from https://repository.stcloudstate.edu/sped_etds/39

Newman, L., Wagner, M., Knokev, A.M., Marder, C., Nagle, K., Shaver, D., Wei, X., Cameto, R., Contreras, E., Ferguson, K., Greene, S., & Schwarting, M. (2011). The post-high school outcomes of young adults with disabilities up to 8 years after high school: A report from the national longitudinal transition study-2 (NLTS2). (NCSER 2011-3005). Menlo Park, CA: SRI International.

New York State Education Department. (February 2009). Annual Performance Report for 2007-08. Retrieved from http://www.p12.nysed.gov/specialed/spp/apr2009/final.pdf

NYSED Commissioner Regulation. (2002a). Part 100. Retrieved from www.p12.nysed.gov/part100/

NYSED Commissioner Regulation. (2002b). Part 200. Retrieved from http://www.p12.nysed.gov/specialed/lawsregs/part200.htm

New York State Education Department. (May 2013). Annual Performance Report for 2011-12. Retrieved from http://www.p12.nysed.gov/specialed/spp/apr2013/contents.htm

New York State Education Department (2015, December). School Districts' Responsibilities to Provide Students with Disabilities with Specially-Designed Instruction and Related Services in the Least Restrictive Environment. Memorandum of the New York State Education Department, Office of Special Education, Albany, NY. Retrieved from http://www.p12.nysed.gov/specialed/publications/2015-memos/least-restrictive-environment-district-responsibilities.html

New York State Education Department. (2015, November). Promoting Inclusion of Students with Disabilities. [PowerPoint slides]. Retrieved from https://www.regents.nysed.gov/common/regents/files/P12-Inclusion%20.pdf

New York State Education Department. (2019). State education department releases 2014 cohort high school graduation rates. Retrieved from http://www.nysed.gov/news/2019/state-education-department-releases-2014-cohort-high-school-graduation-rates

Nirje, B. (1972). The right to self-determination. In W. Wolfensberger, (Ed.), *Normalization: The Principle of Normalization* (p. 176-200). Toronto: National Institute on Mental Retardation.

NYSED. (2011). Individualized Education Program Guidance. Retrieved from http://www.p12.nysed.gov/specialed/publications/iepguidance/intro.htm

NYSED. (2017). New York State Next Generation ELA and Mathematics Standards. Retrieved from https://www.engageny.org/next-generation-learning-standards

NYSED. (2018). Social Emotional Learning: Essential for Learning, Essential for Life. Retrieved from http://www.p12.nysed.gov/sss/documents/SELEssentialforLearningandLife.pdf

Office of Special Education and Rehabilitative Services (ED). (2015). *37th Annual Report to Congress on the Implementation of the" Individuals with Disabilities Education Act," 2015*. ERIC Clearinghouse.

Oh, J., & Park, E. (2003). Special education teachers' perception on self-determination instruction: Educational significance and implementation. *Asian Journal of Education, 4,* 17–39.

Osborne, J. W., & Overbay, A. (2004). The power of outliers (and why researchers should ALWAYS check for them). *Practical Assessment, Research, and Evaluation, 9*(6).

OSEP. (2017). IDEA Part B Profiles. Retrieved from https://osep.grads360.org/#program/idea-part-b-profiles

Pallant, J. (2016). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS,* 6th Ed, McGraw-Hill Education, London.

Palmer, S. B., & Wehmeyer, M. L. (2003). Promoting self-determination in early elementary school: Teaching self-regulated problem-solving and goal-setting skills. *Remedial and Special Education, 24*(2), 115-126.

Palmer, S. B., Wehmeyer, M. L., Gipson, K., & Agran, M. (2004). Promoting access to the general curriculum by teaching self-determination skills. *Exceptional Children, 70*(4), 427-439.

Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, California: Sage Publications.

Pondiscio, R. (2018). An open letter to my ed school dean. Retrieved from https://fordhaminstitute.org/national/commentary/open-letter-my-ed-school-dean

Ponto, J. (2015). Understanding and evaluation survey research. *Journal of Advanced Practitioners in Oncology, 6*(2).

Powers, L. E., Geenen, S., Powers, J., Pommier-Satya, S., Turner, A., Dalton, L. D., Drummond, D., & Swank, P. (2012). My Life: Effects of a longitudinal, randomized study of self-determination enhancement on the transition outcomes of youth in foster care and special education. *Children and Youth Services Review*, *34*(11), 2179-2187.

Powers, L. E., Sowers, J., Turner, A., Nesbitt, M., Knowles, E., & Ellison, R. (1996). Take charge: A model for promoting self-determination among adolescents with challenges. In L. E. Powers, G.H.S. Singer & J. Sowers (Eds.), *On the Road to Autonomy: Promoting Self-Competence for Children and Adolescents with Disabilities* (291-322). Baltimore: Paul H. Brookes.

Powers, L. E., Turner, A., Ellison, R., Matuszewski, J., Wilson, R., Phillips, A., & Rein, C. (2001a). A multi-component intervention to promote adolescent self-determination. *Journal of Rehabilitation, 67*(4), 13-19.

Powers, L. E., Turner, A., Westwood, D., Matuszewski, J., Wilson, R., & Phillips, A. (2001b). TAKE CHARGE for the future: A controlled field-test of a model to promote student

involvement in transition planning. *Career Development for Exceptional Individuals, 24*, 89-104.

Raley, S. K., Shogren, K. A., Mumbardó-Adam, C., Simó-Pinatella, D., & Gine, C. (2018). Curricula to teach skills associated with self-determination: A review of existing research. *Education and Training in Autism and Developmental Disabilities*, *53*(4), 353-362.

Rehabilitation Act of 1973, 29 U. S. C. § 701-744, as amended in 1992, Title I, Section 21, Public Law 102-569, United States Congress, Washington, D. C.

Rivera, G. (1972). *Willowbrook: The last great disgrace*. Sproutflix.

Rowe, D. A., Alverson, C.Y., Unruh, D. K., Fowler, C. H., Kellems, R., & Test, D. W. (2015). A Delphi study to operationalize evidence-based predictors in secondary transition. *Career Development and Transition for Exceptional Individuals, 38*, 113-126.

Saldaña, J. (2016). *The coding manual for qualitative researchers*.

Salmi, P., Scott, N., Webster, A., Larson, S. A., & K. Lakin, K. C. (*2010*) Residential services for people with intellectual or developmental disabilities at the 20th anniversary of the Americans with Disabilities Act, the 10th anniversary of *Olmstead*, and in the year of community living. *Intellectual and Developmental Disabilities, 48*(2), pp. 168-171.

Sanford, C., Newman, L., Wagner, M., Cameto, R., Knokey, A. M., and Shaver, D. (2011). The Post High School Outcomes of Young Adults With Disabilities up to 6 Years After High School. Key Findings from the National Longitudinal Transition Study-2 (NLTS2) (NCSER 2011-3004). Menlo Park, CA: SRI International.

Santos, D., & Miguel, L. (2019). The Relationship between Teachers' Beliefs, Teachers' Behaviors, and Teachers' Professional Development: A Literature Review. *International Journal of Education and Practice*, *7*(1), 10-18.

Self-Determination. (2018). In *The Oxford English dictionary (3d edition)*. Retrieved from http://www.oed.com.wcsu.idm.oclc.org/view/Entry/175207?redirectedFrom=self-determination&

Seo, H. (2014). Promoting the self-determination of elementary and secondary students with disabilities: Perspectives of general and special educators in Korea. *Education and training in autism and developmental disabilities*, 277-289.

Serna, L. A., & Lau-Smith, J. (1995). Learning with purpose: Self-determination skills for students who are at risk for school and community failure. *Intervention in School and Clinic, 30*(3), 142-146.

Shin, S., & Stroup-Rentier, V. L. (2013). Self-Determination and Severe Disabilities. *LC Journal of Special Education, 9*.

Shogren, K., Lee, J., & Panko, P. (2016). An examination of the relationship between postschool outcomes and autonomy, psychological empowerment, and self-realization. *The Journal of Special Education.*

Shogren, K. A., Palmer, S. B., Wehmeyer, M. L., Williams-Diehm, K., & Little, T. (2012). Effect of intervention with the self-determined learning model of instruction on access and goal attainment. *Remedial and Special Education.* Advance online publication.

Shogren, K. A., Villarreal, M. G., Lang, K., & Seo, H. (2017). Mediating role of self-determination constructs in explaining the relationship between school factors and postschool outcomes. *Exceptional Children, 83*(2), 165-180.

Shogren, K. A., & Ward, M.J. (2017). Promoting and enhancing self-determination to improve the post-school outcomes of people with disabilities. *Journal of Vocational Rehabilitation, 48*, 187-196.

Shogren, K. A., Wehmeyer, M. L., Burke, K. M., & Palmer, S. B. (2017). The Self-Determination Learning Model of Instruction: Teacher's Guide. Lawrence, KS: Kansas University Center on Developmental Disabilities.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Rifenbark, G., & Little, T. (2015). Relationships between self-determination and postschool outcomes for youth with disabilities. *Journal of Special Education, 48*(4), 256-267.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N., & Lawrence, M. (2008). Understanding the Construct of Self-Determination: Examining the Relationship Between the Arc's Self-Determination Scale and the American Institutes for Research Self-Determination Scale. *Assessment for Effective Intervention*, *33*(2), 94–107.

Shogren, K., Wehmeyer, M. L., Palmer, S., Forber-Pratt, A., Little, T., & Lopez, S. (2015). Causal agency theory: Reconceptualizing a functional model of self-determination, *Education and Training in Autism and Developmental Disabilities, 50*(3), *251-263.*

Simonsen, M., & Neubert, D. (2012). Transitioning youth with intellectual and other developmental disabilities: Predicting community employment outcomes. *Career Development and Transition for Exceptional Individuals, 36*.

Suriano, C. (2019). (11 March, 2019). Comment made during public meeting of the Board of Regents on Special Education. Albany, NY.

Tabachnick, B. G. and Fidell, L. S. (2001) *Using Multivariate Statistics.* 4th Edition, Allyn and Bacon, Boston.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics*. Boston: Pearson/Allyn & Bacon.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics.* Pearson, Boston.

Test, D. W., Fowler, C., & Kohler, P. (2013). *Evidence-based practices and predictors in secondary transition: What we know and what we still need to know.* Charlotte, NC: National Secondary Transition Technical Assistance Center.

Test, D. W., Karvonen, M., Wood, W. M., Browder, D., & Algozzine, B. (2000). Choosing a Self-Determination Curriculum. *Teaching Exceptional Children, 33*(2).

Test, D. W., Mason, C., Hughes, C., Konrad, M., Neale, M., & Wood, W. M. (2004). Student involvement in individualized education program meetings. *Exceptional Children, 70*(4), 391-412. Retrieved from https://search.proquest.com/docview/201199686?accountid=776

Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Kortering, L. J., & Kohler, P. H. (2009). Evidence-based secondary transition predictors for improving post-school outcomes for students with disabilities. *Career Development for Exceptional Individuals, 32*, 160-181.

The Staff Curriculum Development of New York State. (2011, March 2-3). NYSED Systemic Improvement Plan for Special Education Meeting Notes. Retrieved from http://instruction.monroe.edu/sites/instruction.monroe.edu/files/SCDN%20March%20Minutes.pdf

Thoma, C. Nathanson, R., Baker, S., & Tamura, R. (2002). Self-Determination: What do educators know and where do they learn it?. *Remedial and Special Education, 23*(4), 242-247.

Trochim, W. (2005). *Research Methods: The Concise Knowledge Base.* Cincinnati, OH: Atomic Dog Publishing.

Trochim, W., & Conjoint.ly. (2020). Positivism and post-positivism. *Research Methods Knowledgebase*. Retrieved from https://socialresearchmethods.net/kb/positivism-and-post-positivism/

United States Department of Education, (n.d.). About IDEA. Retrieved from https://sites.ed.gov/idea/about-idea/

United States Department of Health, Education, and Welfare. Office for Civil Rights. (1978). Section 504 of the Rehabilitation act of 1973: fact sheet: handicapped persons rights under Federal law. Washington Dept. of Health, Education, and Welfare, Office of the Secretary, Office for Civil Rights.

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nurshing and Health Sciences, 15*, 398-405.

Van Reusen, A. K., Bos, C. S., Schumaker, J. B., & Deshler, D. D. (2002). *The self-advocacy strategy for enhancing student motivation and self-determination.* Lawrence, KS: Edge Enterprises.

Wagner, M.; Newman, L.; Cameto, R.; Levine, P.; Marder, C. (2003). Going to school: Instructional contexts, programs, and participation of secondary school students with disabilities. *A Report of the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

Wall, C. R. G. (2018). Development through dissonance: A longitudinal investigation of changes in teachers' educational beliefs. *Teacher Education Quarterly*, *45*(3), 29-51.

Ward, M. J. (2005). An historical perspective of Self-Determination in special education: Accomplishments and challenges. *Research and Practice for Persons with Severe Disabilities, 30*(3), 108-112.

Ward, M. J., & Kohler, P. D. (1996). Promoting self-determination for individuals with disabilities: Content and process. In L. E. Powers, G. H. S. Singer, & J. Sowers (Eds.), *Making Our Way: Building Self-Competence Among Children with Disabilities.* Baltimore, MD: Paul H. Brookes.

Wehmeyer, M. L. (1996). A self-report measure of self-determination for adolescents with cognitive disabilities. *Education and Training in Mental Retardation and Developmental Disabilities, 31,* 328-293.

Wehmeyer, M. L. (1999). A functional model of self-determination: Describing development and implementing instruction. *Focus on Autism and Other Developmental Disabilities* (FOCUS), *14*(1).

Wehmeyer, M. L. (2004). Beyond self-determination: Causal agency theory. *Journal of Development and Physical Disabilities, 16(4)*, 337-359.

Wehmeyer, M. L. (2015). Framing the future: Self-Determination. *Remedial and Special Education*, *36*(1), 20-23.

Wehmeyer, M. L., Abery, B. H., Mithaug, D. E., & Stancliffe, R. J. (2003). *Theory in Self-Determination: Foundations for Educational Practice*. Springfield: Charles C. Thomas Publisher, LTD.

Wehmeyer, M. L., Agran, M., Hughes, C., Martin, J. E., Mithaug, D., & Palmer, S. (2007). *Promoting self-determination in students with developmental disabilities*. New York: Guilford.

Wehmeyer, M. L., Agran, M., & Hughes, C. (1998). *Teaching Self-Determination to Students with Disabilities: Basic Skills for Successful Transition*. Baltimore: Paul H. Brookes.

Wehmeyer, M. L., Agran, M., & Hughes, C. (2000). A national survey of teacher promotion of self-determination and student-directed learning. *Journal of Special Education, 32*, 58-78.

Wehmeyer, M. L., Field, S., Doren, B., Jones, B., & Mason, C. (2004). Self-determination and student involvement in standards-based reform. *Exceptional Children, 70*, 413–425.

Wehmeyer, M. L., & Kelchner, K. (1995). Measuring the autonomy of adults with mental retardation: A self-report version of the Autonomous Functioning Checklist. *Career Development of Exceptional Individuals, 18*, 3 - 20.

Wehmeyer, M. L., Kelchner, K., & Richards, S. (1996). Essential characteristics of self-determined behavior of individuals with mental retardation. *American Journal on Mental Retardation, 100(6), 632-642.*

Wehmeyer, M. L., Lawrence, M., Kelchner, K., Palmer, S. B., Garner, N. W., & Soukup, J. (2004). *Whose Future Is It Anyway? A Student -Directed Transition Planning Process* (2nd ed.). Lawrence, KS: Beach Center on Disability.

Wehmeyer, M. L., & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The Impact of Self-Determination. *Education and Training in Developmental Disabilities, 38*(2), 131-144.

Wehmeyer, M. L., Palmer, S. B., Agran, M., Mithaug, D. E., & Martin, J. (2000). Teaching students to become casual agents in their lives: The self-determining learning model of instruction. *Exceptional Children, 66,* 439-453.

Wehmeyer, M. L., Palmer, S. B., Shogren, K. A., Williams-Diehm, K. Soukup, J. (2013). Establishing a causal relationship between interventions to promote self-determination and enhanced student self-determination. *Journal of Special Education, 46*(4), 195-210.

Wehmeyer, M. L., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children*, *63*(2), 245-255.

Wehmeyer, M. L., Shogren, K. A., Palmer, S. B., Williams-Diehm, K. L., Little, T. D., Boulton, A. (2012). The impact of the self-determined learning model of instruction on student self-determination. *Exceptional children, 78*(2), 135-153.

Wehmeyer, M. L., Shogren, K. A., Palmer, S. B., Williams-Diehm, K. L., Little, T. D., & Boulton, A. (2013). The impact of the self-determined learning model of instruction on student self-determination. *Exceptional Children, 78*, 135-153.

Wehmeyer, M. L., & Schalock, R. (2001). Self-determination and quality of life: Implications for special education services and supports. *Focus on Exceptional Children, 33*(8), 1–16.

Wehmeyer, M., & Schwartz, M. (1998). The relationship between self-determination and quality of life for adults with mental retardation. *Education and Training in Mental Retardation and Developmental Disabilities, 33*, 3-12.

White, B. C. (2000). Pre-service teachers' epistemology viewed through the perspectives on problematic classroom situations. *Journal of Education for Teaching, 26,* 279-305.

Wilcox-Herzog, A. (2002). Is there a link between teachers beliefs and behaviors? *Early Education and Development, 13*(1), 81-106.

Williams, R., & Dattilo, J. (1997). Effects of a leisure education on self-determination, social interaction, and positive affect of young adults with mental retardation. *Thearapeutic Recreation Journal, 31,* 244-258.

Wolman, J. M., Campeau, P. L., DuBois, P. A., Mithaug, D .E., & Stolarski, V. S. (1994). *AIR Self-Determination Scale and User Guide.* Washington, DC: American Institutes for Research.

Yin, M., & Shaewitz, D. (2015). One size does not fit all: A new look at the labor force participation of people with disabilities. Washington, D.C.: *American Institutes for Research: Workforce and Lifelong Learning Program*. Retrieved from https://www.air.org/sites/default/files/downloads/report/Labor-Force-Participation-People-with-Disabilities-Yin-Sept-2015.pdf

Yin, M., Shaewitz, D., & Megra, M. (2014). An uneven playing field: The lack of equal pay for people with disabilities. Washington, DC: American Institutes for Research. Retrieved from http://www.air.org/sites/default/files/Lack%20of%20Equal%20Pay%20for%20 People%2 0with%20Disabilities_Dec%2014.pdf.

Yoo, A. (2003). Teacher perceptions and instruction reality on self-determination of students with developmental disabilities in transition education. *Journal of Vocational Rehabilitation, 13*, 183– 209

Appendix A: Letter to Superintendents

Date
Mr. X
Superintendent/Head of Educational Institution or Center
Address

RE: Permission to Conduct Research Study

Dear Mr. X:

I am currently enrolled in the doctoral program in Instructional Leadership in Education at Western Connecticut State University and am in the process of completing my dissertation. The study is entitled Educators' Perspectives and Instruction: Factors that Influence Students' Self-Determination Skills. Instruction in the essential behavioral components of self-determination has been identified as an evidence-based practice to support post-school outcomes of students. Gathering information related to the components of self-determination will inform this area of research.

I am writing to request your district e-mail list to administer a survey regarding educator's perspectives and knowledge about students' self-determination skills. Participants can complete the survey outside of their normal work hours and it will take approximately 20-30 minutes to complete. With your assistance in providing this e-mail list, I will provide you with a summary of the data collected in your school(s). This will help you plan instruction in evidence-based practices in your district. All survey participants will be able to enter a raffle for a $100 gift card.

I hope that the school administration will allow me to recruit educators from the school to anonymously complete a survey on these components through the provision of a contact list of educators in the district. This study will also include contacting educators in the Lower Hudson Valley region individually through independent distribution lists; however, school administrators are being provided with the opportunity for participation before mass distribution of the survey.

Due to the nature of the study, I hope to recruit a diverse population of educators. Interested educators, who choose to participate, will be given a consent form at the beginning of the survey process. If approval is granted, educators may complete the survey at their convenience through

an online survey link. The survey will take approximately 20-30 minutes to complete. Upon request, the primary researcher is also available to distribute paper-based versions of the survey at the school.

The survey results will be pooled for the dissertation project and individual results of this study will remain confidential and anonymous. Should this study be published, only pooled results will be documented. No costs will be incurred by either your school/center or the individual participants.

Your approval to conduct this study will be greatly appreciated. I will follow up with a telephone call next week and would be happy to answer any questions or concerns that you may have at that time. You may contact me at my e-mail address: wozniak004@connect.wcsu.edu.

If you agree, kindly complete the attach form acknowledging your participation and return to Stephanie Wozniak at wozniak004@connect.wcsu.edu

Sincerely,

Stephanie Wozniak, M.S. Ed, LMHC
Doctoral Student, School Counselor, WBL Coordinator, Transition Specialist
Western Connecticut State University

cc: Pauline E. Goolkasian, Ed D, Research Advisor, WCSU

Please complete the following information and check the appropriate boxes:

Name: _____ Title:_____

☐ I agree to provide access to Stephanie Wozniak for the e-mail distribution list for _____ district/program.

☐ Yes, I am interested in receiving a summary of the data for my program/school district.

☐ The e-mail distribution list is attached.

☐ Stephanie Wozniak may contact the following school representative for the e-mail list:

Name: _____ Contact: _____

Appendix B: E-mail to Participants

Dear Educator,

My name is Stephanie Wozniak. I am an employee at Putnam/Northern Westchester BOCES and a doctoral student at Western Connecticut State University. As part of my doctoral work, I am currently conducting a study on educators' perspectives and levels of implementation of instructional practices. You are invited to participate in this research project because you are an educator in the Lower Hudson Valley region of New York State and your perspectives are valued.

The study involves a survey that will take approximately 20-30 minutes to complete. Your responses are confidential. Participants of this survey will have the opportunity to enter a raffle for a $100.00 gift card.

If you have already responded to this survey request, thank you for your participation. You have provided important information in supporting students. If you have not yet responded and would like to participate, you may choose to complete the survey through an online link or a paper-based copy.

If you would like to complete a paper-based version of the survey, please send your mailing address to wozniak004@connect.wcsu.edu. A paper copy of the survey will be sent to you with a pre-addressed, stamped envelope. You do not need to include your name or return address on the envelope.

If you would like to complete the survey online, please click on the following link:

(Link will be included here)

Thank you in advance for your time,

Stephanie Wozniak

cc: Pauline E. Goolkasian, Ed D, Research Advisor, WCSU

Appendix C: Instrument

Instructional Components: A Survey of Educators in the Lower Hudson Valley of New York

Educator Demographic Information

1. Are you currently employed as an educator in an educational setting? ☐ Yes ☐ No

2. In which county do you work? Please write it on the line: _____

3. What is your certification as an educator? Please write all certifications on the line provided:
_____

4. From what college or University did you receive your certification credentials? Please write it on the line provided:_____

5. What is your current role? Select the **one** that best describes your current position.

☐ Administrator	☐ Career and Technical Education Teacher
☐ General Education Teacher, Elementary	☐ Teaching Assistant or Aide
☐ Special Education Teacher, Elementary	☐ Physical or Occupational Therapist
☐ General Education Teacher, Middle	☐ General Education Teacher, High School
☐ Special Education Teacher, Middle	☐ Special Education Teacher, High School
☐ School Psychologist	☐ School Counselor
☐ Social Worker	
☐ Other, Please Specify: _____	

6. How many years have you been in your **current role**? Please write the number of years below: _____

7. How many years have you worked in education? Please write the number of years below:

_____

8. What grade(s) do you currently work with? **Select all that apply**

☐ Pre-K	☐ Fourth	☐ Ninth
☐ Kindergarten	☐ Fifth	☐ Tenth
☐ First	☐ Sixth	☐ Eleventh
☐ Second	☐ Seventh	☐ Twelfth
☐ Third	☐ Eighth	☐ Postsecondary

9. What type of educational setting do you currently work in? **Select all that apply.**

☐ Public

☐ Private

☐ Charter

☐ Approved Out of District Placement

☐ Title I: Local Education Agency that receives financial assistance to support high numbers or high percentages of children from low-income families.

☐ Non-Title I: Local Education Agency that does not receive financial assistance to support high numbers or high percentages of children from low-income families.

☐ Residential

10. Which best describes the environment of your role? Select one below:

☐ Rural ☐ Urban ☐ Suburban

11. Which of the following is the primary mode of instruction for your students? Choose One:

☐ Whole Group Instruction ☐ Peer-Mediated Instruction

☐ One to One Instruction ☐ Cooperative or Co-Teaching

☐ Small Group Instruction ☐ Individual Seatwork

Open-Ended Questions

Please write your response below each question:

12. In your own words, define self-determination as it refers to an individual's life:

_____

_____

_____

13. Please identify the three most important components of self-determination:

_____

_____

_____

14. In your opinion, is self-determination important? Why or why not?

15. In your opinion, do schools and educators support self-determination for students? Why or why not?

16. In your opinion, what do schools/educators need to provide instruction in self-determination skills?

Instructional Components

For each of the following components, rate two responses. First, how important you think teaching each of these is as compared with other instructional areas and, second, how often do you teach each component? Circle only one response for each of the two items under each component.

Level of Importance						**How Often You Teach This Component**					
1	2	3	4	5	6	1	2	3	4	5	6
Low		Medium		High		Never	Rarely	Sometimes	Occasionally	Often	Very Often

17. *Choice-Making* (Encouraging students to identify interests, express preferences, and make choices; providing students the opportunity to select preferences in socially and age-appropriate ways.

Level Of Importance						**How Often You Teach This Component**					
1	2	3	4	5	6	1	2	3	4	5	6

18. *Decision-Making* (Teaching students to make effective decisions using peer and instructional modeling, and providing opportunities to participate in making decisions about their education and extracurricular activities.)

Level Of Importance **How Often You Teach This Component**

1 2 3 4 5 6 1 2 3 4 5 6

19. *Problem-Solving* (Asking students to identify causes of problems, encouraging them to think about how to solve a problem and suggesting strategies that students can use to solve problems in socially appropriate ways).

Level Of Importance **How Often You Teach This Component**

1 2 3 4 5 6 1 2 3 4 5 6

20. *Goal Setting and Attainment* (Encouraging students to set goals, and helping students recognize what steps need to be taken to achieve those goals.)

Level Of Importance **How Often You Teach This Component**

1 2 3 4 5 6 1 2 3 4 5 6

21. *Self-Advocacy and Leadership Skills* (Teaching students to know and stand up for their (and others') rights in socially appropriate ways, to negotiate effectively and assertively, and to be an effective leader or team member).

Level Of Importance **How Often You Teach This Component**

1 2 3 4 5 6 1 2 3 4 5 6

22. *Self-Management and Self-Regulation Skills* (Teaching students to monitor and evaluate their own behavior, encouraging the development of intrinsic motivation, and having students set their own schedule. Encouraging students to engage in self-directed learning through strategies like self-monitoring, self-instruction, self-reinforcement, and picture cues).

Level Of Importance **How Often You Teach This Component**

1 2 3 4 5 6 1 2 3 4 5 6

23. *Self-Awareness and Self-Knowledge* (Giving students various opportunities to identify their own strengths and limitations through interaction with their peers, and then guiding them to apply that knowledge to their advantage).

Level Of Importance **How Often You Teach This Component**

1 2 3 4 5 6 1 2 3 4 5 6

24. For each strategy below, circle whether or not you have used or taught it with any current or previous students:

a. Self-Monitoring (Encouraging students to evaluate their own behavior, effort, or progress in order to take control of their own learning) Yes No

b. Self-Evaluation (Encouraging students to evaluate their own behavior, effort, or progress, in order to take control of their own learning.) Yes No

c. Self-Reinforcement (Guiding your students to reward their own efforts, progress, and accomplishments.) Yes No

d. Self-Instruction (Demonstrating how to do a task first and then encourage students to instruct themselves orally.) Yes No

e. Goal-setting (students sets own instructional goal) Yes No

f. Self-Scheduling (Encouraging your students to choose the order of their schedule) Yes No

g. Using visual aids or cues to direct attention or behavior. (antecedent cue regulation) Yes No

25. What reasons might lead you to decide not to provide instruction in any of the previously listed self-determination skills? **(Check all that apply)**

☐ Your students have adequate skills in these areas

☐ Your students have difficulty communicating effectively.

☐ Your students are too young to learn these skills.

☐ You find it difficult to empathize with your students

☐ You have difficulty collaborating with your colleagues or administrators.

☐ Someone else is responsible for instruction in this area.
If you checked this, please list responsible party:_____

☐ You don't have sufficient time to provide instruction in these areas.

☐ You don't have the latitude to provide instruction in these areas. (i.e., because of the course content requirements, state testing requirements, etc.)

☐ There are other areas in which your students need instruction more urgently (e.g., academic areas, challenging behavior).

☐ Your students would not benefit from instruction in these areas because of their characteristics (i.e., their passivity, level of their ability or capacity to engage in behavior)

☐ You haven't had sufficient training or information on teaching in these areas.

26. Are you familiar with the term self-determination? **(Check the answer below)**

☐ Yes (If yes, go to Question 27) ☐ No (If no, go to Question 28)

27. If yes, from what source have you heard the term? **(Check all that apply)**

☐ Undergraduate Training
☐ Graduate Training
☐ District In-Service Training
☐ Training Conference or Workshop
☐ Education Text
☐ Professional Journal
☐ Article
☐ Colleagues
☐ Other (Please List)
_____

28. Is your primary assignment as **(Check the answer below)**

☐ General Education Teacher ☐ Special Education Teacher

☐ Integrated

(If you do not teach students with disabilities, skip to Question 29) (If you have taught a student with a disability, proceed to Question 33)

29. If you teach students with a disabilities, please identify the disability categories of the students you support. **(Check all that apply)**

☐ Specific Learning Disabilities

☐ Speech or Language Disability

☐ Intellectual or Developmental Disability

☐ Emotional Disability

☐ Traumatic Brain Injury

☐ Multiple Disabilities

☐ Deafness or Hard of Hearing

☐ Physical Disability

☐ Blindness or Visual Disability

☐ Autism Spectrum Disorder

☐ Deaf-Blindness

30. In what setting do you teach? **(Check one of the following)**

☐ Regular Class ☐ Self-Contained Class

☐ Resource Room

31. Please provide some example of self-determination that may be on Individual Education Plan documents. Write your response in the space provided below:

_____

_____

_____

32. Which of the following do you include in discussions when creating IEP goals or educational plans (Choose all that apply)

☐ Students ☐ Outside Agency Personnel

☐ Related Service Personnel ☐ Parents

☐ Others (please specify) _____

33. How much will teaching your students self-determination help them improve their academic performance and social behaviors in school? **Select the appropriate rating below**:

1	2	3	4	5	6
Not Helpful		Somewhat Helpful			Very Helpful

34. How much will teaching self-determination prepare your students for future years in secondary education and/or transition to adult goals? **Select the appropriate rating below**

1	2	3	4	5	6
Not Helpful		Somewhat Helpful			Very Helpful

Appendix D: Permission to Use Survey

Wozniak, Stephanie

From: Wehmeyer, Michael L. <wehmeyer@ku.edu>
Sent: Wednesday, May 20, 2020 11:23 AM
To: Wozniak, Stephanie
Subject: RE: Self-determination
Attachments: Wehmeyer Agran Hughes SD Survey article.pdf; Cho Wehmeyer Kingston Elementary Tchrs Knowledge JSE.pdf

[External Sender - Do not click links or open attachments unless you recognize the sender and know the content is safe.]
Yes, you have my permission to publish this survey in your dissertation with credit. You should credit the survey as being adapted from the two articles I've attached.

Best of luck wrapping this up, it's always nice to hear from folks who want to continue the work in self-determination.

Best,
Mike

From: Wozniak, Stephanie <swozniak@pnwboces.org>
Sent: Wednesday, May 20, 2020 9:31 AM
To: Wehmeyer, Michael L. <wehmeyer@ku.edu>
Subject: RE: Self-determination

Thank you, Dr. Wehmeyer.

In order to be as clear as possible for the purposes of permission and publication, I have attached the adapted survey to this email. You will notice that there are open-ended qualitative questions included as additions. Please review the attached and confirm your permission for me to use and publish this version, with credit, of course in my dissertation.

On a side note, I would like to thank you for all of your work in this area. It has become a passion of mine. In my dissertation study, I coded the respondents' answers and compared them to your operationalized theory. In this way, I was able to assess their level of understanding of the component behaviors of self-determination that can be taught.

Many Thanks,

Stephanie Wozniak, EdD, LMHC
Pronouns: she, her, hers
Certified School Administrator,
Counselor, and WBL Coordinator
Transition Specialist
Lower Hudson Regional Partnership Center
http://rsetasc.pnwboces.org/

Putnam Northern Westchester BOCES
200 BOCES Drive
Yorktown Heights, NY 10598

(914) 607 6768

1

Appendix E: Consent Form

My name is Stephanie Wozniak. I am an employee at Putnam/Northern Westchester BOCES and a doctoral student at Western Connecticut State University. As part of my doctoral work, I am currently conducting a study on educators' perspectives and levels of implementation of instructional practices. You are invited to participate in this research project because you are an educator in the Lower Hudson Valley region of New York State and your perspectives are valued.

Your participation in this research study is voluntary and you may choose not to participate. If you decide to participate in this research study, you may stop at any time without completing the survey. There will not be any consequences for withdrawing your participation.

The study involves a survey that will take approximately 30 minutes to complete. Your responses are confidential. No identifying information will be collected. All data collected will be stored in either a locked file cabinet or a password protected electronic database. To protect your confidentiality, no personally identifying will be included in the survey.

The results of this study will be used for scholarly purposes to better understand educators' level of implementation and perspectives on instructional practices and support for the success of students. Overall perspectives gathered from this research may be used in a scholarly publication and your participation will help further knowledge and understanding in this area.

The possible risks or discomforts of the study are minimal. You will be asked to reflect on your instructional practice and perspectives. Reflecting on your practice may feel uncomfortable. You have the right to withdraw participation at any time.

Participants of this survey will have the opportunity to enter a raffle for a $100.00 gift card. Upon completion of the survey you may enter your name and contact information into a separate raffle entry form. This information will be collected separately from the information in the survey and will not be connected to your answers in the survey.

If you have any questions about the research study, please contact Stephanie Wozniak at Western Connecticut State University. My contact information is wozniak004@connect.wcsu.edu. This research has been reviewed by the Western Connecticut State University Internal Review Board. If you have questions concerning the rights of the subjects involved in research studies, please contact the WCSU IRB Chair at irb@wcsu.edu and mention protocol # 1819-91

By participating in this survey, you agree that you have read the above information, you voluntarily agree to participate, and you are at least 18 years of age.

- Agree
- Disagree

Appendix F: Codebook of the Identified 3 Most Important Components of Self-Determination

Codebook of the Identified 3 Most Important Components of Self-Determination

Theme	Codes
Responsibility	Responsibility Accountability
Energy	Energy Stamina
Relatedness	Guidance Connections Relatedness Communication Collaboration Support Relationships Input Cooperation Ability to Relate Contributor in the Community Reinforcement
Nurture	Nurture Love when Little Environment
Nature	Nature Extrinsic Forces
Resources	A Means Opportunity Resources Range of Options

(Continued)

Codebook of the Identified 3 Most Important Components of Self-Determination

Theme	Codes
Persistence/Perseverance	Will Moving Forward Drive Grit Unrelenting Non-Quitting Never Giving Up Determination Overcoming Failure Perseverance Persistence Willingness to make Numerous Attempts Willingness to Overcome Willingness to Keep on Trying Tolerance for Tackling Challenging Tasks No Fear of Failure Tenacity Consistency Stubbornness Stick-to-it-iveness Earnest Motivation to Push Through Endurance Mindset to Feel Comfortable with Struggle Resilience Follow-Through Fortitude Courage Strength Confidence Trial & Error

(Continued)

Codebook of the Identified 3 Most Important Components of Self-Determination

Theme	Codes
Purpose	Commitment
	Dedication
	Ambition
	Purpose
	Work Ethic
	Hard-working
	Belief in Purpose
	Hard Work
	Resolve
	Effort
	Focus
	Vocationing
	Discipline
	Diligence
Willingness	Willingness
	Willingness to Succeed
	Willingness
Self-Realization	Resistance
	Assertiveness
	Initiative
	Motivation
Aspiration	Need
	Hope
	Aspiration
	Desire
	Desire to Want End Result
	Desire to Succeed
	Desire to Change
	Wanting to Better Yourself
Reflection	Self-Reflection
	Reflective

(Continued)

Codebook of the Identified 3 Most Important Components of Self-Determination

Theme	Codes
Psychological Empowerment	Self-Reliance Empowered Identity Pride Strength Thoughtfulness Compassion
Emotional Characteristics	Creativity Passion Understanding
Patience	Patience Ability to Delay Gratification
N/A	N/A Unknown
Choice-Making	Free Choice Choice
Problem-Solving	Problem-Solving
Decision-Making	Decision-making Making Better Decisions Ability to Understand Actions and Consequences
Goal-Setting & Attainment	Identifying What it is That You Want Conceptual Understanding of What is Required Evaluation Evaluation & Revising Road-Mapping Planning Direction Having Strategies to Reach Goals Plan Goal Helping Individuals Carve Paths Knowing How to Achieve What One Wants Understanding Realistic Goals Knowing What you Want

(Continued)

Codebook of the Identified 3 Most Important Components of Self-Determination

Theme	Codes
Self-Advocacy	Voice Advocacy Asking for Help Self-Advocacy
Self-Management & Self-Regulation	Coping Skills
Self-Awareness & Self-Knowledge	Sense of Self Self-Awareness Understanding of Strengths & Continuing Needs Knowledge of Self Understanding of Strengths, Weakness Evaluating Strengths & Weaknesses
Competence	Accomplishment Talent Successful Competence Ability/Potential Excellence Success Imitation
Knowledge	Understanding Social Norms Knowledge Critical Thinking Skills/Knowledge Knowledge of Options
Experience	Community experience Experience Preparedness Learning Preparation Education Educated
Realistic	Being Realistic Reality

(Continued)

Codebook of the Identified 3 Most Important Components of Self-Determination

Theme	Codes
Organization	Organization Efficiency Time Management
Well-Being	Well-Being Wellness Safety Basic Needs Met Ability to Pursue Goals without the Limitations of Need for Housing
Struggle	Struggle Risk-Taking
Adaptability	Openness Adaptability Flexibility
Mental Health	Satisfaction Balanced Inner Satisfaction Happiness Mental Strength Mental Toughness Emotional Stability Maturity Moral Values
Autonomy	Free Will Ownership Control Autonomy/Agency Independent Thinking Independence How Someone Controls Their Life Freedom/Liberty Liberated Right to Determine Political Status Right to Determine Cultural Development Right to Determine Social Development

(Continued)

Codebook of the Identified 3 Most Important Components of Self-Determination

Theme	Codes
Integrity	Strength of Character Investment Honesty Respect Trust Integrity
Self-Efficacy	Belief in one's ability Self-Value View of Yourself Belief Belief in oneself Self-Worth Self-Esteem
Faith	Faith Belief in a Higher Power
Positive Thinking	Optimism Positive Thinking Attitudes High Expectations
Curiosity	Questioning Discovery Curiosity Interest
Equity	Freedom from Societal Restrictions Equity Equality Under Law Fairness Justice Right Access
Vision	Foresight Seeing the Big Picture Vision

Appendix G: Codebook of What Educators Need to Support Self-Determination

Codebook of What Educators Need to Support Self-Determination

Theme	Code
Instruction	Start Teaching it Early Integrate Instruction into the Curriculum Curriculum/Lesson Plans Direct Instruction Practice in Skills/Experiential Learning Modeling Differentiation
Change in Policies	Change Grading Policy Change Testing/Assessment Policies Change in Policies/Attitudes
Environmental Changes	Tools/Resources More Time More Staff Funding Change Schedule
Supportive Relationships	Parent/Home Support Support of Administration Positive Relationships Support Students Positive Affirmation
Opportunities/Freedom for Choice-making	Encourage Independence Students Teachers Choice in Programming
Educators' Self-Determination	Educators' Self-Determination
Increasing Educators' Knowledge & Awareness of Self-Determination	Increasing Educators' Knowledge & Awareness of Self-Determination
I don't think you can teach it.	I don't think you can teach it.
N/A	Unsure N/A

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Pauline Goolkasian, Ed.D.	*Pauline Goolkasian*	April 17, 2020
Primary Advisor	Signature	Date
Jody S. Piro, Ed.D.	*Jody S. Piro*	April 17, 2020
Interim Program Coordinator	Signature	Date
Joan S. Palladino, Ed.D.	Joan S. Palladino	May 11,2020
Interim Dean, School of Professional Studies	Signature	Date
Christopher Shankle, Ed.D.	*Christopher Shankle*	May 14, 2020
Associate Director, Division of Graduate Studies	Signature	Date